

# 47<sup>th</sup> Annual ENVIRONMENTAL SHOW OF THE SOUTH May 16-18, 2018



## Welcome to the Environmental Show of the South



Welcome to the largest and most comprehensive environmental conference and tradeshow in the region: the Environmental Show of the South! We're glad you could join us back in Chattanooga! You're in good company, and we've got lots to keep you busy. Download our mobile app to help keep track of all the presentation options and which ones you might like to check out. Scan the QR code at Registration for easy access on Google Play or the App Store.

#### At a Glance

#### **Plenary Sessions**

Attendees and booth workers alike attend the Opening Session in the Banquet Rooms on Wednesday morning to officially kick off the event. Outside of plenary events like this, the Exhibit Hall will be the main gathering point, hosting breakfast, breaks, and the Welcome Reception Wednesday evening. A special off-site reception will be held Thursday Night at the Tennessee Aquarium.

#### **Breakout Sessions**

Attendees may consult the At-A-Glance session schedules on pages 16-19 to decide from seven or eight options during each of the three rounds of breakout sessions Wednesday afternoon and throughout the day Thursday. All breaks are synchronized, so you'll always be able to meet back up with your colleagues to compare notes! Download our app to learn more about each presenter.

#### **Exhibit Hall**

With over 160 exhibitors—check out their listings at the back of this program—the Exhibit Hall will host all technical session breaks, a Welcome Reception Wednesday evening, and the Ice Cream Social on Thursday afternoon. Thanks to our generous sponsors, you can enter to win several great prizes, including a 65" 4k HDTV!

#### **Sponsors**

A special thanks to our sponsors:



#### Schedule of Events

	Wednesday, May 16, 2018
7:30 AM	Registration opens; Breakfast in the Exhibit Hall
9:00 AM	Opening session begins
11:30 AM	Lunch is served in Banquet Rooms
1:00 PM	First round of breakout sessions begin
2:30 PM	Networking break in the Exhibit Hall
4:30 PM	Breakout sessions close
5:00 PM	Welcome Reception held in the Exhibit Hall
	Thursday, May 17, 2018
7:30 AM	Breakfast available in the Exhibit Hall
8:00 AM	Second round of breakout sessions begin
9:30 AM	Networking break in the Exhibit Hall
11:30 AM	Lunch is served in Banquet Rooms
11:45 AM	Lunchtime Plenary session begins
1:00 PM	Third round of breakout sessions begin
2:30 PM	Ice Cream Social held in the Exhibit Hall
4:45 PM	Breakout sessions conclude
7:00 PM	Networking Reception at the Tennessee Aquarium
	Friday, May 18, 2018
7:30 a.m.	Breakfast available; Feedback forms due
8:15 a.m.	Closing session begins
11:00 a.m.	Environmental Show of the South concludes

#### About TDEC

The Tennessee Department of Environment and Conservation (TDEC) exists to enhance the quality of life for citizens of Tennessee and to be stewards of our natural environment. TDEC is the chief environmental and natural resource regulatory agency in Tennessee and arranges the Environmental Show of the South each year to provide high-quality, low-cost environmental training as well as updates on government/industry developments and trends.

Technical sessions are planned and moderated by TDEC staff, and six TDEC divisions will present updates on recent program developments during the Lunchtime Session Thursday. Additionally, technical staff will be on hand at the TDEC Regulatory booth

to answer your questions one on one. Be sure to visit them and pick up your complimentary conference tote bag!



#### **Opening Remarks** 9:00 AM-9:15 AM

Patrick J. Flood, PE, Director, TDEC - Division of Solid Waste Management

9:15 AM-9:35 AM

Welcome to the 47th Annual **Environmental Show of the South** 

Shari Meghreblian, PhD, Commissioner, TN Department of Environment &

Conservation

9:35 AM-10:20 AM

**Keynote Address: EPA Updates** 

Trey Glenn, Regional Administrator, U.S. Environmental Protection Agency

10:20 AM-10:50 AM

**Securing the Next Generation of Environmental Leaders** 

Dania Rodriguez, Executive Director, **ASTSWMO** 

10:50 AM-11:00 AM

**Recycler of the Year Awards** Lincoln Young, Tennessee Recycling Coalition

11:00 AM-11:15 AM



11:15 AM-11:30 AM

**Special Presentation of the Governor's Environmental** Stewardship Award, Materials **Management Category Commissioner Meghreblian** 

**Morning Announcements** Patrick J. Flood, PE

11:30 AM-1:00 PM

**Lunch Served in Banquet Rooms** 

## Keynote Speaker: Trey Glenn



Trey Glenn leads the EPA's environmental protection efforts in the southeastern states, bringing 23 years of environmental and regulatory experience to this role.

Serving the largest EPA region with 63 million people, he champions protection of our ecosystems and natural resources, encourages partnerships with our states and helps EPA achieve its mission.

Previously, Mr. Glenn served as director of the Alabama Department of Environmental Management (ADEM) from 2005-2009. In this position, he was tasked with ensuring a safe, healthy, and productive environment for all Alabama residents. He also served as division director for the Alabama Office of Water Resources from 2001-2005, where he was responsible for leading day-to-day operations on coordination and management of Alabama's water resources. Most recently, he worked as an independent engineer consultant and business owner focused on environmental issues.

Mr. Glenn is a graduate of Auburn University with a bachelor of science degree in civil engineering. He received his MBA from the University of Alabama at Birmingham. Mr. Glenn is also a professional engineer. He is married with four children, and they reside in Birmingham, Alabama.

## Shari Meghreblian, PhD



Shari Meghreblian joined the Tennessee Department of **Environment & Conservation** to oversee the environmental regulatory programs for the protection of Tennessee's air, land and water, and was named Commissioner of the department effective just over two weeks ago.

Recognized for her ability to provide strategic insight and analyze

processes and procedures to streamline business practices, Dr. Meghreblian has been appointed to several boards and councils supporting three different departments of state government.

Shari has more than 20 years of combined experience in private sector manufacturing and environmental management systems. She joined TDEC from General Motors' plant in Spring Hill, TN, where she served as the environmental operations manager since 2005.

She holds a PhD in Environmental Management and a master's degree in Engineering from Vanderbilt University, and a bachelor of science in Marketing/ Economics from Western Kentucky University.

## Dania Rodriguez



Dania Rodriguez is the Executive Director of the Association of State and Territorial Solid Waste Management Officials (ASTSWMO) in Washington, DC. She has 24 vears of demonstrated national environmental experience with expertise in the field of technical, financial and policy development and a comprehensive knowledge of State and Territorial programs.

For a number of years, she has served as the liaison between the States and numerous Federal Agencies such as EPA and DOD on important policy issues. As the Executive Director she runs the day-to-day operations of ASTSWMO. This includes managing the Association's Budget, Cooperative Agreements, the ASTSWMO Staff, and providing support to the ASTSWMO Board of Directors.

Prior to her career at ASTSWMO. Dania worked for the American Petroleum Institute (API). Dania received a B.A. in Political Science from Hood College in Frederick, Maryland, and an Executive Certificate in Nonprofit Management from the Georgetown University, McCourt School of Public Policy.

1:00 PM-1:10 PM	Financial Management Panel Moderator Seth Benge, TDEC, opens the session
1:10 PM-1:35 PM	Profit/Loss Tracking for Small Recyclers Is your recycling program surviving or thriving? A simple spreadsheet can help answer that question for you, your local officials, and for grants.  Doug Giles, Marshall County Solid Waste
1:35 PM-2:00 PM	EPA's Cost-Benefit Analysis Tool Marty Seaman, RRS
2:00 PM-2:25 PM	Cost Benefiting County Recycling Programs Introduces a record-keeping tool for County Solid Waste Programs to use in tracking recycling costs, revenues, and market changes. Kim Raia, University of Tennessee CTAS
2:25 PM-2:30 PM	Panel Conclusion
2:30 PM-3:00 PM	Refreshments in the Exhibit Hall - Sponsored by Jim's Tank Service
3:00 PM-3:05 PM	Solid Waste Planning Panel Moderator Ashby Barnes, TDEC, opens the discussion
3:05 PM-3:30 PM	Davidson County Long-Term Zero Waste Master Plan This presentation will include the process, findings, recommendations and potential next steps from the Metro Nashville Davidson County Zero Waste Master Planning. Kelly Tipler, Metro Nashville Public Works
3:30 PM-3:55 PM	Using Technology for Waste Diversion & Community Outreach With a grant from the Recycling Partnership, the City of Atlanta was able to significantly reduce contamination. Learn how technology helped implement this successful pilot. Michelle Wiseman, City of Atlanta / Mayor's Office of Resilience
3:55 PM-4:20 PM	Louisville's Solid Waste Study Efforts, Future is Now A description of Louisville Metro's journey completing its first full integrated solid waste

management study.

Pete Flood, Louisville Metro Department of Public Work

4:20 PM-4:30 PM **Session Close** 

Welcome Reception hosted by Republic Services in the Exhibit Hall 5:00 PM-6:30 PM











#### **Mobile App**

Download our mobile app for an interactive view of our program. The app includes extra details like speaker bios and allows you to favorite presentations you might like to attend. Mobile app developed by BDY Environmental with support from Burr & Forman.

3:55 PM-4:20 PM

5:00 PM-6:30 PM

**Developing Efficient Systems for Mobile Inspection and Permitting**Robert Lee will bring his experience of developing software systems and talking with inspectors in

field positions, to offer encouragement and strategy for Environmental Safety.

Robert E Lee Jr, Codepal

4:20 PM-4:30 PM Session Close

5:00 PM-6:30 PM Welcome Reception hosted by Republic Services in the Exhibit Hall

Catherine Lee, AICP, Green & Healthy Homes Initiative

Wednesday, May 16

# **Air Quality**

Room 12

Moderator Brooke Barrett, TDEC, opens the session 1:00 PM-1:10 PM Reflections on the CAAA of 1990 & A Tale of Two Cities 1:10 PM-1:50 PM A look at what worked well and what could have worked better out of the CAAA of 1990. Chattanooga's story: from the most polluted in the nation to one of the cleanest. Robert H. Colby, Chattanooga-Hamilton County Air Pollution Control Bureau **EPA Region 4 Air Quality Initiatives** 1:50 PM-2:30 PM **Beverly Banister**, EPA Region 4 Air, Pesticides, and Toxics Management Division Refreshments in the Exhibit Hall - Sponsored by Jim's Tank Service 2:30 PM-3:00 PM **Air Quality Health Benefits in Tennessee** 3:00 PM-3:40 PM This presentation provides an overview of respiratory health benefits resulting from historic air quality improvements in Tennessee. Michelle Oakes, PhD, TDEC - Division of Air Pollution Control Tennessee and the Volkswagen Diesel Settlement 3:40 PM-4:20 PM An overview of the VW Settlement and information on TDEC's anticipated approach and efforts to date regarding the Beneficiary Mitigation Planning process and stakeholder engagement. **Molly Cripps**, TDEC - Office of Energy Programs **Session Close** 4:20 PM-4:30 PM

Welcome Reception hosted by Republic Services in the Exhibit Hall

Page 5 of 36

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Wednesday PM

Thursday AM

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Welcome Reception hosted by Republic Services in the Exhibit Hall

5:00 PM-6:30 PM

1:00 PM-1:10 PM Moderator Harry McCann, TDEC, opens the session

1:10 PM-2:00 PM Landfill Stability Part 2: Visual Indicators and Corrective Measures

Overview of how to identify landfill instability issues and when operators should be concerned, as well as what corrective measures they may need to take.

**Jeffrey J. Breedlove**, Promus Engineering, LLC **Brian Wolf, PE**, Civil & Environmental Consultants, Inc.

2:00 PM-2:30 PM Challenges of Early Closure of Landfills

This discussion involves the operational and design challenges of when a landfill is capped prior to

reaching final design grades.

Wm. Christopher Murray PE, PLS, PP, Civil & Environmental Consultants, Inc.

2:30 PM-3:00 PM Refreshments in the Exhibit Hall - Sponsored by Jim's Tank Service

3:00 PM-3:30 PM Win - Win by Reuse of the Customer's Special Waste

Putting together a Win-Win plan for a customer's disposal needs of their special waste and at the

same time helping to solve an on going issue at our site. **Steve Keylor**, Waste Connections - Meadowbranch Landfill

3:30 PM-4:00 PM Tier 2 Testing for MSW Landfill Emission Guidelines and NSPS

A summary of the Tier 2 testing protocols for determining if a landfill must comply with the

Emission Guidelines (EG) and New Source Performance Standards (NSPS).

Matt Lamb, Smith Gardner, Inc.

4:00 PM-4:20 PM DSWM Elevates Quality and Consistency with Training

TDEC will present new training and outreach programs aimed at elevating our quality and

consistency in inspections and materials sampling and analysis. **Patrick Mulligan, PG**, TDEC - Division of Solid Waste Management

4:20 PM-4:30 PM Session Close

5:00 PM-6:30 PM Welcome Reception hosted by Republic Services in the Exhibit Hall











1:00 PM-1:10 PM

1:10 PM-1:50 PM

5:00 PM-6:30 PM

Moderator Robert G. O'Dette, TDEC, opens the session

**Impacts of Invasive Aquatic Plants on Lake Ecosystems** 

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4:20 PM-4:30 PM

5:00 PM-6:30 PM



**Session Close** 





	Learn how invasive aquatic plants are threatening the ecological health and recreational use of lakes throughout the region. Should they be controlled? If so, how? If not, what can we expect? <b>Timothy Joseph, PhD</b> , Watts Bar Ecology and Fishery Council
1:50 PM-2:30 PM	Navigating the New Jersey and Washington State Stormwater Programs as Models for Approving Manufactured Treatment Devices  The NJ and WA stormwater programs have significant and subtle processes which can serve as models for local agencies to approve proprietary treatment devices.  Mark Miller, AquaShield, Inc.
2:30 PM-3:00 PM	Refreshments in the Exhibit Hall - Sponsored by Jim's Tank Service
	Moderator George C. Garden, TDEC, resumes the session
3:00 PM-3:40 PM	Evaluation of Municipal Sewerage Systems in Tennessee The paper provides an overview of the statewide infiltration and inflow (I/I) problem relative to NPDES permit compliance and evaluation metrics used for moratoriums.  Robert G. O'Dette, TDEC - Division of Water Resources George C. Garden, PE, BCEE, TDEC - Division of Water Resources
3:40 PM-4:20 PM	Sustainability in Green Landscaping & Tried and True Plant Choices for Bioswales in TN  When green landscaping projects fail, we often point fingers at the plants. We'll discuss other factors that make or break a planting and provide details of plant species that thrive.  Janie J. Becker, Stantec Consulting
4:20 PM-4:30 PM	Session Close

Wednesday, May 16	Environmental Law	Room 18-19
1:00 PM-1:10 PM	Moderator James C. Wright, Butler, Vines & Babb, ope	ens the session
1:10 PM-2:30 PM	Ethics Part I Discussion of new ethics opinions, Board Resources for Lawyers, and wellness. Laura Chastain, Board of Professional Responsibility	the importance of Attorney
2:30 PM-3:00 PM	Refreshments in the Exhibit Hall - Sponsored by Jim's	Tank Service
3:00 PM-4:20 PM	Ethics in Litigation and Appeals Ethical considerations and professionalism in appellate practice. William C. Koch, Jr., Nashville School of Law	

**Environmental Law** 

Welcome Reception hosted by Republic Services in the Exhibit Hall

Welcome Reception hosted by Republic Services in the Exhibit Hall

8:00 AM-8:10 AM Organics Panel

Moderator Robert Wadley, TDEC, opens the session

**Materials Management** 

8:10 AM-8:35 AM Taking On Large Organics Collection Projects

Discussion of the obstacles, opportunities, and initiatives involved in the effort to implement facility-wide organics collection and achieve zero-waste to make the Hartsfield-Jackson Atlanta International Airport the greenest airport in the world.

**Liza Milagro**, Hartsfield-Jackson Airport

8:35 AM-9:00 AM Surplus Food Donations – "An Alternative to Throwing Away Food"

A discussion on the environmental, social, and financial benefits of donating prepared surplus food. The process, misconceptions, and technology of prepared food donations will be addressed.

**lim Larson**, Food Donation Connection

9:00 AM-9:25 AM Food Waste Management and Composting on a College Campus

College campuses can serve as a model for industry best management practices. Come learn how UTK feeds people, microorganisms, and the soil with leftover food.

Jay Price, MS, MBA, CCOM™, University of Tennessee, Knoxville

9:25 AM-9:30 AM Panel Conclusion

9:30 AM-10:00 AM Refreshments in the Exhibit Hall - Sponsored by tarpARMOR

10:00 AM-10:05 AM **Grants Panel** 

Moderator Lynn Tutor, TDEC, opens the discussion

10:05 AM-10:30 AM Audit Preparedness for Grant Contracts

Being audit ready and the documentation used to verify compliance.

Lawanda M. Johnson, TDEC - Division of Internal Audit

10:30 AM-10:55 AM North Carolina DEQ Recycling and Materials Management Grant Programs

NC will present on the long-standing recycling and materials management grant programs designed to increase recycling capacity and support economic development in the state.

Wendy Worley, NC Department of Environmental Quality

10:55 AM-11:20 AM EPA Region 4 Grant Program

Brief overview of the EPA Region 4 grant program and options available for local governments for

solid waste and material recovery management. **Delores Rodgers-Smith**, U.S. EPA Region 4

Larry Christley, RSM, TDEC - Division of Solid Waste Management

11:20 AM-11:30 AM Session Close

11:30 AM-1:00 PM Networking Break - Lunch Served in Banquet Rooms











Remediation Thursday, May 17 Room 11 Moderator Alison Hensley, TDEC, opens the session 8:00 AM-8:10 AM 8:10 AM-8:35 AM **Horizontal Wells for Remediation of Chlorinated Solvent Sites** Horizontal wells installed with directional drilling facilitate remediation of areas difficult to access. Three case studies will be presented discussing horizontal well remediation. Kyle J. Carlton, PG, Directional Technologies, Inc. Using EPA Brownfield Grants as a Tool for Community Revitalization 8:35 AM-9:00 AM We will discuss how communities can use EPA Brownfield Grants with a toolbox of other community revitalization tools including State Brownfield Programs for a significant positive impact to foster community revitalization. Amanda M. Herrit, MS, Terracon Consultants, Inc. Dallas Whitmill, Terracon Consultants, Inc 9:00 AM-9:30 AM Choosing the Correct Remediation Tool from the Remediation Toolbox This presentation will provide insight into the technical aspects of assessing remedial processes to determine the best alternative for a specific site. Wade Meese, Innovative Environmental Technologies, Inc. Refreshments in the Exhibit Hall - Sponsored by tarpARMOR 9:30 AM-10:00 AM Reasons and Technology for Controlling Excessive Methanogenesis during 10:00 AM-10:30 AM **Remedial Actions** Case studies and remedial alternatives on how proactive control of Archaea proliferation during ERD/ISCR remedial actions can improve efficacy and help control potential negative effects of excessive methane production. Jim Mueller, Provectus Environmental Products, Inc. 10:30 AM-10:55 AM Controlled Release Environmental Reactants - A More Efficient Approach to In Situ Remediation These materials can deliver oxidants to the subsurface in the quantity and location necessary to achieve remedial goals without the need for pressurized liquid injections. Dr. Lindsay Swearingen, Specialty Earth Sciences, LLC

10:55 AM-11:20 AM Proposed Changes to Rules for Decontamination of Meth Labs

Major changes to the existing meth lab cleanup rules are being proposed, along with more comprehensive guidance on sampling, investigation, and decontamination.

Chris Andel, PG, TDEC - Division of Remediation

11:20 AM-11:30 AM Session Close

11:30 AM-1:00 PM Networking Break - Lunch Served in Banquet Rooms











8:40 AM-8:50 AM Moderator Amelia Poe, TDEC, opens the session 8:50 AM-9:30 AM **Air Quality Permit Fees** This presentation will cover Title V fee changes for 2018 and 2019 and the need for future Title V and non-Title V fee increases and the current stakeholder process. James P. Johnston, TDEC - Division of Air Pollution Control Refreshments in the Exhibit Hall - Sponsored by tarpARMOR 9:30 AM-10:00 AM 10:00 AM-10:40 AM **EPA Air Quality Update** Update on federal air regulations and programs. Scott Davis, U.S. EPA Region 4 **Tennessee Air Quality Update** 10:40 AM-11:20 AM This presentation will provide information regarding air quality in Tennessee and changes to the Air Division's regulations and procedures. Paul LaRock, TDEC - Division of Air Pollution Control **Session Close** 11:20 AM-11:30 AM

**Networking Break - Lunch Served in Banquet Rooms** 

11:30 AM-1:00 PM

Thursday, Ma	Hazardous Waste Room 13
8:00 AM-8:10 AM	Moderator Benjamin Almassi, TDEC, opens the session
8:10 AM-8:50 AM	The Complications of Amending the Definition of Solid Waste  API vs. EPA (D.C. Cir. 2017 and 2018) rulings impact on Underground Storage Tanks and Solid Waste Disposal Control Board rule amendments and rulemaking process.  L. Wayne Gregory, TDEC - Office of General Counsel
8:50 AM-9:30 AM	Federal and State Hazardous Waste, Universal Waste and Used Oil Regulation & Policy Update  A combined EPA and Tennessee update on recent and pending changes in the federal and state hazardous waste regulations and any related guidance.  Jacqueline Okoreeh-Baah, TDEC - Division of Solid Waste Management Alan Newman, U.S. Environmental Protection Agency (EPA) Larry Lamberth, U.S. Environmental Protection Agency (EPA)
9:30 AM-10:00 AM	Refreshments in the Exhibit Hall - Sponsored by tarpARMOR
10:00 AM-10:40 AM	Understanding EPA's Generator Improvements Rule States are "on the clock" to adopt the more stringent changes under EPA's 2016 Generator Improvements Rule. We'll discuss the significant changes - more/less stringent. Scott C. Dunsmore, CET, Lion Technology Inc.
10:40 AM-11:20 AM	<b>DSWM Elevates Quality and Consistency with Training</b> TDEC will present new training and outreach programs aimed at elevating our quality and consistency in inspections and materials sampling and analysis. <b>Patrick Mulligan, PG,</b> TDEC - Division of Solid Waste Management
11:20 AM-11:30 AM	Session Close
11:30 AM-1:00 PM	Networking Break - Lunch Served in Banquet Rooms

Thursday AM

Thursday, May 17

8:00 AM-8:10 AM	Moderator Patrick Mulligan, TDEC, opens the session
8:10 AM-9:00 AM	Landfill Fires - Cause, Prevention, and Mitigation Landfill fires present significant environmental problems and impact landfill operations. This presentation will focus on the cause, prevention, and mitigation of these events.  Robert C. Bachus, PhD, PE, DGE, Geosyntec Consultants
9:00 AM-9:30 AM	Landfill Leachate Collection Systems - a Review of the Basics This presentation provides a review of the basics associated with landfill leachate collection and removal systems. Topics include design, layout, operation, and maintenance.  Andrew J. Querio, PE, CPESC, EIL (Environmental Information Logistics) Chirag Nanavati, EIL (Environmental Information Logistics)
9:30 AM-10:00 AM	Refreshments in the Exhibit Hall - Sponsored by tarpARMOR
10:00 AM-10:15 AM	Landfill Leachate Collection Systems Continued
10:15 AM-11:00 AM	Odor Control at Class I Landfills Jeffrey Michael Fantell, PE, Joyce Engineering, Inc., a LaBella Company Jason Repsher, TDEC - Division of Solid Waste Management
11:00 AM-11:20 AM	Solid Waste Regulatory Updates Brief update on TN regulatory changes affecting landfills, processors, and other solid waste permit holders as well as changes to recyclers. Nickolaus Brent Lytle, TDEC - Division of Solid Waste Management
11:20 AM-11:30 AM	Session Close
11:30 AM-1:00 PM	Networking Break - Lunch Served in Banquet Rooms

**Solid Waste** 

## **Exhibit Hall Features and Prizes**

#### **Exhibitors!**

With over 160 different organizations represented in the Exhibit Hall this year, you could spend hours just trying to see all the booths! Fortunately, we've scheduled plenty of time outside of the technical sessions for you to try to meet every exhibitor on site.

#### Welcome Reception - Wednesday Evening

Join us for a networking reception in the Exhibit Hall, Wednesday, May 16, hosted by Republic Services, Inc. Starting at 5:00 PM, we'll have appetizers and drinks and get to know one another.



tarpARMOR

#### **Networking Breaks**

All that technical training can be intense! Stretch your legs and your arms by walking over to the Exhibit Hall for coffee and snacks with a side of handshaking. Our Wednesday afternoon break is sponsored by Jim's Tank Service and our Thursday morning break is sponsored by tarpARMOR and Southwestern Sales.

#### Ice Cream Social – Thursday Afternoon

Your last chance to see the Exhibit Hall, the Ice Cream Social takes place during the Thursday afternoon networking break from 2:30 to 3:15 PM and features prize drawings and giveaways (plus sundaes)!
You must be present to win!
Hospitality sponsored by HEPACO.

Serious experience for serious times

#### **HDTV Giveaway –**

How can you be sure you've seen all the exhibitors? Take your Exhibit Hall map with you and get it stamped at each booth you visit. Visit them all for a chance to win a 65" 4k HDTV! The completed map is your entry form. Just drop it in the box at the Exhibit Hall break area by 2:20 PM on Thursday afternoon. The TV giveaway is sponsored by Weaver Consultants Group.

#### Scavenger Hunt -

Can you spot all 25 shapes hidden in the exhibitor displays? If you can, you will be entered to win an Amazon Echo Show sponsored by NorthStar Contracting Group! Completed entry forms must be dropped in the break area of the Exhibit Hall by **NorthStar** 2:20 PM on Thursday.

#### **Exhibitor Superlatives!**

New this year, we're looking for your vote on which exhibitor has the most fun display and who has the most educational or informative booth. Your ballot form will enter both you and the exhibitor of your choice to win one of four \$150 gift cards! Thanks to our prize sponsors AmCon Environmental, Pointmap CAD & GIS Services, SWS Environmental Services, and Titan Environmental USA. Ballots are due by the end of lunch on Thursday - 1 PM.







Room 15

Moderator George C. Garden, TDEC, opens the session 8:00 AM-8:10 AM

Fifty Year Plume Response to Successive Remedial Measures Employed with 8:10 AM-8:50 AM an Evolving Site Conceptual Model

Carbon Tetrachloride plume response to multi-generations of remedial measures employed at a 50-year old complex site with an evolving Site Conceptual Model.

David Heidlauf, Ramboll

**Potable Water Loss in Tennessee** 8:50 AM-9:10 AM

> Audited water loss data provides insights into the magnitude, cost, and impact on overall water resources in the state. The presenter will discuss these insights and in what direction Tennessee

may be headed with respect to this vital resource. Angela Jones, PE, TDEC - Division of Water Resources

PAA for Wastewater Disinfection: What is Required in TN? 9:10 AM-9:30 AM

Summarization of the two methods based on receiving stream size for PAA permitting currently in

TN and the number of permitted sites.

**Ariel Wessel-Fuss**, TDEC - Division of Water Resources

Refreshments in the Exhibit Hall - Sponsored by tarpARMOR 9:30 AM-10:00 AM

Moderator Ariel Wessel-Fuss, TDEC, resumes the session

UAS-Based LiDAR Technology to Support Water Quality and Environmental 10:00 AM-10:40 AM

Site Management

UAS based LiDAR technology is well suited for water quality and environmental site management.

This presentation will review its capabilities and limitations through case studies.

Andrew Carroll, Skytec LLC

Bowling Green, KY - An Example of the Challenges of Developing on Karst 10:40 AM-11:20 AM

This presentation will highlight several of the challenges of developing on Karst terrains, such as

sinkhole collapse, flooding and susceptibility to pollution.

Timothy Eugene Slattery, MS, TPM

Session Close 11:20 AM-11:30 AM

**Networking Break - Lunch Served in Banquet Rooms** 11:30 AM-1:00 PM

## and More Thanks

#### **Attendee Feedback Prize -**

We want to hear from you! Give us your feedback and be entered to win one of two \$150 gift cards! Forms may be turned in at the Exhibit Hall break area or to On-Site Registration. The winner will be drawn during the Closing Session, and you must be present to win. Prizes sponsored by Enterprise Oil and Lighting Resources.





#### **Exhibitor Feedback Prize -**

We want to hear from Exhibitors too! Exhibitors who complete and return their feedback forms by 2:20 PM on Thursday will be entered to win a free standard booth for next year's event, May 15-17, 2019!





While we're thanking people...Our thanks to Environmental Specialties International (ESI) for our eco-friendly conference lanyards once again this year. These are made of 45% recycled material!





Practices for providing our conference tote bags, a 100% recycled and Made in the USA product. Be sure to stop by the TDEC Regulatory booth to pick up yours!

(The conference padfolios are also Made in the USA and their covers are made of 80% post-consumer material.)

Additionally, we want to thank Wright Brothers Contracting for providing food for the hungry pub crawlers on Tuesday night.



Finally, thanks as well to Burr & Forman for sponsoring our mobile app and to BDY Environmental for developing it.

BDY NATURAL SCIENCES CONSCITANTS BURR + FORMAN

Thursday AM

11:20 AM-11:30 AM

11:30 AM-1:00 PM

#### **Environmental Law** Thursday, May 17 Room 18-19 Moderator Joseph Sanders, TDEC, opens the session 8:00 AM-8:10 AM OSHA Safety & Health Critical New Regulatory and Legislative 8:10 AM-8:50 AM **Developments, Updates and Hot Topics** Michael C. Mallen, Miller & Martin PLLC 8:50 AM-9:30 AM The Ole Pay and Chase ... How UST Has Reduced Their Risk This presentation will demonstrate actual case studies that has lead to the recovery of reimbursement funds improperly paid to contractors providing work for UST. Melinda Weir, TDEC - Division of Underground Storage Tanks Refreshments in the Exhibit Hall - Sponsored by tarpARMOR 9:30 AM-10:00 AM The Complications of Amending the Definition of Solid Waste 10:00 AM-10:35 AM API vs. EPA (D.C. Cir. 2017 and 2018) rulings impact on Underground Storage Tanks and Solid Waste Disposal Control Board rule amendments and rulemaking process. L. Wayne Gregory, TDEC - Office of General Counsel **Navigating the Local Approval Process for Permitting of Solid Waste** 10:35 AM-11:20 AM Discussion of the Solid Waste permitting process as it relates to the application of the "Jackson Law" and local approval provisions for landfills and processing facilities, Permit by Rule, etc. William L. Penny, Burr & Forman, LLP

Session Close
Networking Break - Lunch Served in Banquet Rooms

## **Professional Development**

**SWANA Members** can earn up to 12 Continuing Education Units (CEUs) for relevant technical sessions. CEU forms will be available at the TN SWANA Booth and in the sessions.



E. Joseph Sanders, TDEC - Office of General Counsel

**Professional Engineers** can earn Professional Development Hours (PDHs) at the conference. Keep a record of your attendance, including a marked copy of the agenda indicating items attended, your receipt, and badge.

Attorneys can earn Continuing Legal Education (CLE) credits through the Tennessee Bar Association. Attorneys who wish to receive CLE credit must complete a form in the Environmental Law Sessions documenting session attendance and pay an additional \$150 fee along with conference registration.

Certified Hazardous Materials Managers/
Practitioners can earn up to five Certification
Maintenance Points (CMPs) per day. CHMMs and
CHMPs are responsible for their own recordkeeping
and must keep their badges and agendas.

**Certificates of Attendance** can be purchased by any attendee for \$10. Certificates can be picked up on May 18 prior to the conclusion of the conference.

**Certified Landfill Operators** can earn up to nine hours of continuing education during the conference. One credit hour is earned for each hour spent in the Solid Waste sessions. Half credit may also be earned for attending certain presentations in other tracks:

Materials Management (Rm 9-10):

All presentations quality for half credit

Air Quality (Rm 12):

Updates on NSPS XXX/Cf Implementation and Compliance (Thursday 1:00 - 2:30 PM)

Coal Combustion Residuals (CCR - Rm 14):
All presentations qualify (Thursday 1:00 - 4:45 PM)

Water (Rm 16-17):

Water/Air Quality Requirements and Updates for Landfills (Thursday 1:00 - 1:50 PM) Multi-Site Performance Review of Liquid Activated Carbon for Groundwater Treatment (Thursday 3:55 -4:45 PM)

Forms will be available in the qualifying sessions to those desiring the credit. There is no additional charge for this.



## 11:30 AM-11:45 AM

#### Attendees get their lunches and get settled

#### 11:45 AM-12:45 PM

#### **TDEC Bureau of Environment Programs**

An opportunity to hear from the TDEC Bureau of Environment divisions regarding the year's highlights and upcoming plans for each program.

**Lunchtime Plenary** 

TDEC - Division of Air Pollution Control

TDEC - Division of Radiological Health

TDEC - Division of Remediation

TDEC - Division of Solid Waste Management

TDEC - Division of Underground Storage Tanks

TDEC - Division of Water Resources

12:45 PM-1:00 PM

#### Attendees finish their meals and prepare for the next breakout

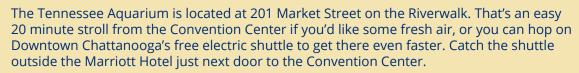






# **Aquarium Reception**

Attendees, exhibitors, speakers, and booth workers alike are all invited to join us at the Tennessee Aquarium Thursday evening, thanks to the Recycle Used Oil Program! We'll have the run of both aquarium buildings and the Pavilion outside, where our Conference Program cover photo was shot during the sunset last year! Our private reception starts at 7:00 PM under the Pavilion, with light hors d'oeuvres and access to a cash bar. Then, grab a drink and make your way inside the aquarium where we can mix and mingle among the aquatic life until 9:00 PM. TDEC's Used Oil Program is sponsoring this event to give us a firsthand view of why it's so important to recycle our used oil: so it doesn't contaminate our waterways and hurt these amazing animals!















			Wednesday After	noon Session		
		Room 9-10	Room 11	Room 12	Room 13	
		Materials Management	Toxic Substances	Air Quality	Emerging Contaminants	
1:00 p.m.		Session opening	Session opening	Session opening	Session opening	1:00 p.m.
1:05 p.m.		Financial Management Panel	TOOM 1. 11 11	D. (1. 11. 0.1.1. (10.0.)		1:05 p.m.
1:10 p.m. 1:15 p.m.		Profit/Loss Tracking for Small	New TSCA Active/Inactive		Emerging Contaminants: Poly- &	1:10 p.m. 1:15 p.m.
1:20 p.m.		Recyclers	Chemical Lists: Are Your	& A Tale of Two Cities	Perfluoroalkyl Substances	1:20 p.m.
1:25 p.m.	Part 1		Chemicals Banned?		(PFAS)	1:25 p.m.
1:30 p.m.	l - P	EDA O I D CIA I I T I	1 15 :			1:30 p.m.
1:35 p.m. 1:40 p.m.	, uoi	EPA Cost Benefit Analysis Tool	Lead Poisoning: All in the			1:35 p.m. 1:40 p.m.
1:45 p.m.	Sess		Family			1:45 p.m.
1:50 p.m.	cal §			EPA Region 4 Air Quality	Keeping Receiving Waters Safe:	1:50 p.m.
1:55 p.m.	chni	0 15 50	T. 5	Initiatives	Removing PFCs	1:55 p.m.
2:00 p.m. 2:05 p.m.	Te	Cost Benefiting County	The Environmental Injustice of			2:00 p.m. 2:05 p.m.
2:10 p.m.		Recycling Programs	Lead Poisoning in Shelby County			2:10 p.m.
2:15 p.m.						2:15 p.m.
2:20 p.m.		Financial Management and				2:20 p.m.
2:25 p.m. 2:30 p.m.		Financial Management ends  Refresh	I Iments served in the Exhibit Hal	- Sponsored by Jim's Tank Ser	vice	2:25 p.m. 2:30 p.m.
3:00 p.m.		Solid Waste Planning Panel		· · · · · · · · · · · · · · · · · · ·	North Carolina DEQ Update on	3:00 p.m.
3:05 p.m.		Davidson County Long-Term	Shipping Hazardous Waste	Tennessee	PFOS / PFOA / GenX	3:05 p.m.
3:10 p.m.		Zero Waste Master Plan	ompping Hazardous waste	Tomicsocc	THOOP THOMP GENER	3:10 p.m.
3:15 p.m. 3:20 p.m.						3:15 p.m. 3:20 p.m.
3:25 p.m.	rt 2		Comprehensive Housing			3:25 p.m.
3:30 p.m.	- Pal	Using Technology for Waste	Interventions: A New Way			3:30 p.m.
3:35 p.m.	n 1	Diversion & Community	Forward for Healthy & Efficient			3:35 p.m.
3:40 p.m. 3:45 p.m.	essic	Outreach	Communities	Tennessee and the Volkswagen	Per- and Polyfluoroalkyl	3:40 p.m. 3:45 p.m.
3:50 p.m.	al Se			Diesel Settlement	Substances (PFAS) in the	3:50 p.m.
3:55 p.m.	hnic	Louisville's Solid Waste Study	Developing Efficient Systems for		Environment	3:55 p.m.
4:00 p.m.	Tec	Efforts, Future is Now	Mobile Inspection and Permitting			4:00 p.m.
4:05 p.m. 4:10 p.m.						4:05 p.m. 4:10 p.m.
4:15 p.m.						4:15 p.m.
4:20 p.m.		Session close	Session close	Session close	Session close	4:20 p.m.
4:25 p.m. 5:00 p.m.		Welcome Recent	 tion held in the exhibit hall 5:00 t	to 6:30 nm - Snonsored by Renu	hlic Services	4:25 p.m. 5:00 p.m.
σ.σο μ.π.		Welcome Recept	Thursday Morn		iblic octvices	σ.σο μ.π.
		Room 9-10	Room 11	Room 12	Room 13	
		Materials Management	Remediation	Air Quality	Hazardous Waste	
7:30 a.m.			Exhibit Hall open; Breakfast	served in the Exhibit Hall		7:30 a.m.
8:00 a.m.		Session opening	Session opening		Session opening	8:00 a.m.
8:05 a.m.		Organics Panel	Horizontal Wells for Remediation		The Commissions of Americalism	8:05 a.m. 8:10 a.m.
8:10 a.m. 8:15 a.m.		Taking On Large Organics Collection Projects	of Chlorinated Solvent Sites		The Complications of Amending the Definition of Solid Waste	8:15 a.m.
8:20 a.m.		Collection Projects	of Chiofinated Solvent Sites		the Delinition of Solid Waste	8:20 a.m.
8:25 a.m.	art 1					8:25 a.m.
8:30 a.m. 8:35 a.m.	2 - F	Curplus Food Donations "A:	Heing EDA Provintiald Craste			8:30 a.m. 8:35 a.m.
8:40 a.m.	ion	Surplus Food Donations – "An	Using EPA Brownfield Grants as a Tool for Community	Session opening		8:40 a.m.
8:45 a.m.	Ses	Alternative to Throwing Away Food"	Revitalization	· · ·		8:45 a.m.
8:50 a.m.	ical	1 000	i Novilalization	Air Quality Permit Fees	Federal and State Hazardous	8:50 a.m.
8:55 a.m. 9:00 a.m.	echn	Food Wasto Management and	Chaosing the Correct		Waste, Universal Waste and	8:55 a.m. 9:00 a.m.
9:05 a.m.	ř	Food Waste Management and Composting on a College	Choosing the Correct Remediation Tool from the		Used Oil Regulation & Policy	9:05 a.m.
9:10 a.m.		Campus	Remediation Toolbox		Update	9:10 a.m.
9:15 a.m.		σαπραδ	Nomediation Toolbox			9:15 a.m.
9:20 a.m. 9:25 a.m.		Organics ends				9:20 a.m. 9:25 a.m.
9:30 a.m.			erved in the Exhibit Hall - Spons	sored by tarpARMOR & Southwe	estern Sales	9:30 a.m.
			-			

Wednesday Afternoon Session						
	Room 14	Room 15	Room 16-17	Room 18-19		
	Underground Storage Tanks	Solid Waste	Water	Environmental Law		
1:00 p.m.	Session opening	Session opening	Session opening	Session opening		1:00 p.m.
1:05 p.m.	D: : : (11 1 1 10)	1 1511 Ot 1 1111 D 1 O 1 5		Eu. D. (1		1:05 p.m.
1:10 p.m. 1:15 p.m.		Landfill Stability Part 2: Visual	Impacts of Invasive Aquatic	Ethics Part I		1:10 p.m. 1:15 p.m.
1.20 p.m	Tanks Regulatory Changes	Indicators and Corrective	Plants on Lake Ecosystems			1:20 p.m.
1:25 p.m.	Update	Measures			art 1	1:25 p.m.
1:30 p.m.	Managing Rebound by				- P.	1:30 p.m.
1:35 p.m.	Combining Persulfate, In Situ				on 1	1:35 p.m.
1:40 p.m. 1:45 p.m.	Ferrate Generation and				essi	1:40 p.m. 1:45 p.m.
1:50 p.m.	Enhanced Bioremediation for		Navigating the New Jersey and		al S	1:50 p.m.
1:55 p.m.	Safer, More Effective Remedial		Washington State Stormwater		hnic	1:55 p.m.
2:00 p.m.	Restoration & Reuse of	Challenges of Early Closure of	Programs as Models for		Tec	2:00 p.m.
2:05 p.m.	Abandoned Facilities with	Landfills	Approving Manufactured			2:05 p.m.
2:10 p.m. 2:15 p.m.	Underground Storage Tanks		Treatment Devices			2:10 p.m. 2:15 p.m.
2:20 p.m.			Treatment Devices			2:20 p.m.
2:25 p.m.						2:25 p.m.
2:30 p.m.		reshments served in the Exhibit	Hall - Sponsored by Jim's Tank			2:30 p.m.
0.05	Groundwater High-Resolution	Win - Win by Reuse of the	Evaluation of Municipal	Ethics Part II: Ethics in Litigation		3:00 p.m.
3:05 p.m. 3:10 p.m.	Site Characterization (HRSC)	Customer's Special Waste	Sewerage Systems in	and Appeals		3:05 p.m. 3:10 p.m.
3:15 p.m.			Tennessee			3:15 p.m.
3:20 p.m.						3:20 p.m.
3:25 p.m.					art 2	3:25 p.m.
3:30 p.m.		Tier 2 Testing for MSW Landfill			<u>-</u>	3:30 p.m.
3:35 p.m. 3:40 p.m.	LICT Coop Children Lloine	Emission Guidelines and NSPS	Custoinability in Cross		on 1	3:35 p.m. 3:40 p.m.
0.45	UST Case Study Using		Sustainability in Green		essi	3:45 p.m.
3:50 p.m.	Innovative Technologies		Landscaping & Tried and True		Sla	3:50 p.m.
3:55 p.m.			Plant Choices for Bioswales in		hnic	3:55 p.m.
4:00 p.m.		DSWM Elevates Quality and	TN		Tec	4:00 p.m.
4:05 p.m. 4:10 p.m.		Consistency with Training				4:05 p.m. 4:10 p.m.
4:15 p.m.						4:15 p.m.
4:20 p.m.	Session close	Session close	Session close	Session close		4:20 p.m.
4:25 p.m.		<u> </u>				4:25 p.m.
5:00 p.m.	Welcome Re		:00 to 6:30 pm - Sponsored by R	depublic Services	_	5:00 p.m.
	Dage 44	· · · · · · · · · · · · · · · · · · ·	lorning Session	Doom 40 40		
	Room 14	Room 15	Room 16-17	Room 18-19		
7:30 a.m.		Solid Waste	Water fast served in the Exhibit Hall	Environmental Law		7:30 a.m.
8:00 a.m.		Session opening	Session opening	Session opening		8:00 a.m.
8:05 a.m.		Occording Opening	Occording Opening	Occording Opening		8:05 a.m.
8:10 a.m.		Landfill Fires - Cause,	Fifty Year Plume Response to	OSHA Safety & Health Critical		8:10 a.m.
8:15 a.m.		Prevention, and Mitigation	Successive Remedial Measures	New Regulatory and Legislative		8:15 a.m.
8:20 a.m.			Employed with an Evolving Site	Developments, Updates and Hot	_	8:25 a.m.
8:25 a.m. 8:30 a.m.			Conceptual Model	Topics	Part	8:25 a.m. 8:30 a.m.
8:35 a.m.					-2 ا	8:35 a.m.
8:40 a.m.					sior	8:40 a.m.
8:45 a.m.					Ses	8:45 a.m.
8:50 a.m.			Potable Water Loss in	The Ole Pay and Chase – How	ical	8:50 a.m.
8:55 a.m. 9:00 a.m.		Landfill Leachate Collection	Tennessee	UST Has Reduced Their Risk	echr	8:55 a.m. 9:00 a.m.
9:05 a.m.					F	9:05 a.m.
9:10 a.m.		Systems - a Review of the	PAA for Wastewater Disinfection			9:10 a.m.
9:15 a.m.		Basics: Design, Layout,				9:15 a.m.
9:20 a.m.		Construction, Operation, and				9:20 a.m.
9:25 a.m.	Dofrochmon	Maintenance	l ponsored by tarpARMOR & Sout	thwestern Sales		9:25 a.m.
9:30 a.m.	Kenesiillei	ito serveu in the Exhibit Half - 5	polisored by tarpantition & Sou	inwestern oales		9:30 a.m.

		Thursday Morning Se	ession Continued		
	Room 9-10	Room 11	Room 12	Room 13	
	Materials Management	Remediation	Air Quality	Hazardous Waste	
10:00 a.m. 10:05 a.m. 10:10 a.m. 10:15 a.m. 10:20 a.m.	Grants Panel Audit Preparedness for Grant Contracts	Reasons and Technology for Controlling Excessive Methanogenesis during Remedial Actions	U.S. EPA Air Quality Update	Understanding EPA's Generator Improvements Rule	10:00 a.m. 10:05 a.m. 10:10 a.m. 10:15 a.m. 10:20 a.m.
10:25 a.m. 10:30 a.m. 10:35 a.m. 10:40 a.m. 10:45 a.m. 10:50 a.m.	North Carolina DEQ Recycling and Materials Management Grant Programs	Controlled Release Environmental Reactants - A More Efficient Approach to In Situ Remediation	Tennessee Air Quality Update	DSWM Elevates Quality and Consistency with Training	10:25 a.m. 10:30 a.m. 10:35 a.m. 10:40 a.m. 10:45 a.m. 10:50 a.m.
10:55 a.m. 11:00 a.m. 11:05 a.m. 11:10 a.m. 11:15 a.m.	EPA Region 4 Grant Program	Proposed Changes to Rules for Decontamination of Meth Labs		Consistency with Training	10:55 a.m. 11:00 a.m. 11:05 a.m. 11:10 a.m. 11:15 a.m.
11:20 a.m. 11:25 a.m.	Session close	Session close	Session close	Session close	11:20 a.m. 11:25 a.m.
11:30 a.m.		Lunch served in Banquet			11:30 a.m.
		Thursday Aftern			
	Room 9-10	Room 11	Room 12	Room 13	
	Materials Management	Vapor Intrusion	Air Quality	DOT Haz. Waste Refresher	
1:00 p.m. 1:05 p.m.	Session opening Rethinking C&D Panel	Session opening	Session opening	Session opening	1:00 p.m. 1:05 p.m.
1:10 p.m. 1:15 p.m. 1:20 p.m. 1:25 p.m. 1:30 p.m.	Construction & Demolition Recycling in the US: Current State of Practice	Locating and Assessing the Age of VOC Sources Beneath Large Buildings	Updates on NSPS XXX/Cf Implementation and Compliance	DOT Hazardous Materials Refresher & Update	1:10 p.m. 1:15 p.m. 1:20 p.m. 1:25 p.m. 1:30 p.m.
1:35 p.m. 1:40 p.m. 1:45 p.m. 1:50 p.m. 1:55 p.m.	The Baltimore Wood Project: Finding Wealth in the Waste	Pilot Testing: The Key To Vapor Intrusion Mitigation Success			1:35 p.m. 1:40 p.m. 1:45 p.m. 1:50 p.m. 1:55 p.m.
2:00 p.m. 2:05 p.m. 2:10 p.m. 2:15 p.m. 2:20 p.m. 2:25 p.m.	Stream	Vapor Intrusion Mitigation - Engineering Controls for Indoor Air Protection of Large Commercial Structures			2:00 p.m. 2:05 p.m. 2:10 p.m. 2:15 p.m. 2:20 p.m. 2:25 p.m.
2:30 p.m.	Ice Cream	Social held in the Exhibit Hall 2:	30 to 3:15 pm - Sponsored by H	IEPACO	2:30 p.m.
3:15 p.m. 3:20 p.m. 3:25 p.m. 3:30 p.m. 3:35 p.m. 3:40 p.m. 3:45 p.m.	Household Haz. Waste and BOPAE Ethanol and Sugar Recycling	Natural Source Zone Depletion	Permits by Rule and General Permits	DOT Hazardous Materials Refresher & Update Continued	3:15 p.m. 3:20 p.m. 3:25 p.m. 3:30 p.m. 3:35 p.m. 3:40 p.m.
3:45 p.m. 3:50 p.m. 3:55 p.m. 4:00 p.m. 4:05 p.m.	Temporary HHW Containers, Convenience to the Citizens	Vapor Intrusion Mitigation Technologies & Trends for	EPA Memorandums from Scott Pruitt		3:45 p.m. 3:50 p.m. 3:55 p.m. 4:00 p.m. 4:05 p.m.
4:10 p.m. 4:15 p.m. 4:20 p.m. 4:25 p.m. 4:30 p.m.	Charge Up Safety: Addressing Lithium Battery Management	Brownfield Redevelopment			4:10 p.m. 4:15 p.m. 4:20 p.m. 4:25 p.m. 4:30 p.m.
4:35 p.m.	Session close	Session close	Session close	Session close	4:35 p.m.
4:40 p.m. 4:45 p.m		Froo	tima		4:40 p.m. 4:45 p.m

		Thursday Mornin	g Session Continued			
	Room 14	Room 15	Room 16-17	Room 18-19		
		Solid Waste	Water	Environmental Law		
10:00 a.m.		Landfill Leachate Continued	UAS-Based LiDAR Technology	The Complications of Amending		10:00 a.m.
10:05 a.m.			to Support Water Quality and	the Definition of Solid Waste		10:05 a.m.
10:10 a.m.			Environmental Site Management			10:10 a.m.
10:15 a.m.		Odor Control at Class I Landfills	Livilorimental ofte Management			10:15 a.m.
10:20 a.m. 10:25 a.m.					12	10:20 a.m. 10:25 a.m.
10:23 a.m.					Part	10:30 a.m.
10:35 a.m.				Navigating the Local Approval	2 -	10:35 a.m.
10:40 a.m.			Bowling Green, Kentucky - An	Process for Permitting of Solid	sion	10:40 a.m.
10:45 a.m.			Example of the Challenges of	Waste Landfills	Ses	10:45 a.m.
10:50 a.m.			Developing on Karst	waste Landillis	cal	10:50 a.m.
10:55 a.m.			Developing on Naist		chni	10:55 a.m.
11:00 a.m. 11:05 a.m.		Solid Waste Regulatory Updates			Te	11:00 a.m. 11:05 a.m.
11:10 a.m.						11:10 a.m.
11:15 a.m.						11:15 a.m.
11:20 a.m.		Session close	Session close	Session close	1	11:20 a.m.
11:25 a.m.						11:25 a.m.
11:30 a.m.			quet Rooms 11:30 to 1 pm			11:30 a.m.
		·	ternoon Session			
	Room 14	Room 15	Room 16-17	Room 18-19		
	Coal Combustion Residuals	SWANA	Water	Environmental Law		
1:00 p.m. 1:05 p.m.	Session opening	Session opening	Session opening	Session opening		1:00 p.m. 1:05 p.m.
1:10 p.m.	Beneficial Use of Coal	Going Green and Saving Green:	Water/Air Quality Requirements	Tweets in the Air 2	ш	1:10 p.m.
1:15 p.m.	Combustion Residuals for	The Environmental and	and Update for Landfills	Twodo iii tilo 7 tii 2		1:15 p.m.
1:20 p.m.	Closure of Coal Ash	Financial Benefits of Exposed	and opdate for Landinis		_	1:20 p.m.
1:25 p.m.					art	1:25 p.m.
1:30 p.m.	Beyond Cap-in-Place: CCR On-	Geosynthetics			3 - P	1:30 p.m.
1:35 p.m. 1:40 p.m.	Site Clean Closure Using				ion	1:35 p.m. 1:40 p.m.
1:45 p.m.	Macroencapsulation				essi	1:45 p.m.
1:50 p.m.	Lessons Learned with Closure	Land Application Requirements	How To Get Your Wastewater	1	SalS	1:50 p.m.
1:55 p.m.	by Removal Projects	for Residual with Pathogens and			hnic	1:55 p.m.
2:00 p.m.		Vectors			Tec	2:00 p.m.
2:05 p.m. 2:10 p.m.	O Div iv.	-				2:05 p.m. 2:10 p.m.
2:15 p.m.	Group Discussion					2:10 p.m. 2:15 p.m.
2:20 p.m.						2:20 p.m.
2:25 p.m.						2:25 p.m.
2:30 p.m.	Ice Cre	am Social held in the Exhibit Ha	III 2:30 to 3:15 pm - Sponsored I	by HEPACO		2:30 p.m.
3:15 p.m.	Innovative Hydraulic Matrices:	Electrical Leak Detection for	Technical and Cost	Chattanooga Brownfields: The		3:15 p.m.
3:20 p.m.	Expanded BMP's Using	Landfill Liner Geomembranes -	Comparisons of Candidate Final	Encore Mystery Tour		3:20 p.m.
3:25 p.m. 3:30 p.m.	Standard Equipment	A Case Study	Cover Systems for CCR Unit			3:25 p.m. 3:30 p.m.
	Remedial Technologies to	· ·	Closures			3:35 p.m.
3:40 p.m.	Address CCR Constituents in				11 2	3:40 p.m.
3:45 p.m.	Groundwater				- Pa	3:45 p.m.
3:50 p.m.					n 3	3:50 p.m.
3:55 p.m.	Investigating CCR Impacts: An	Case Study on Use of Passive	Multi-Site Performance Review		ssio	3:55 p.m.
4:00 p.m. 4:05 p.m.	Overview of the EIP Process in	Soil Gas Sampling Devices to	of Liquid Activated Carbon for		II Se	4:00 p.m. 4:05 p.m.
4:10 p.m.	Tennessee	Delineate VOC and TPH	Groundwater Treatment		inica	4:10 p.m.
4:15 p.m.	Group Discussion	Groundwater Impacts			Lech	4:15 p.m.
4:20 p.m.						4:20 p.m.
4:25 p.m.						4:25 p.m.
4:30 p.m.	Cil-	0	Ci			4:30 p.m.
4:35 p.m. 4:40 p.m.	Session close	Session close	Session close			4:35 p.m. 4:40 p.m.
4:45 p.m.		Free	time			4:45 p.m.
7:00 p.m.	Networking Reception	to be Held at the Tennessee Aq		Ised Oil Recycling Program		7:00 p.m.
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## Thursday, May 17 Materials Management

1:00 PM-1:10 PM

Rethinking C&D Panel
Moderator Bob Fletcher, TDEC, opens the session

1:10 PM-1:50 PM

Construction and Demolition Recycling in the US: Current State of Practice
The current state of C+D debris recycling in the US will be discussed. Benefits, opportunities and challenges will be highlighted.

1:50 PM-2:30 PM The Baltimore Wood Project: Finding Wealth in the Waste Stream

Vacant and blighted housing units plague many Cities. In Baltimore The USFS and Humanim are working with the City to remove blight, create jobs, and restore the land.

**Morgan Grove** 

Jeffrey E. Carroll, MBA LEED AP, Humanim

Timothy G. Townsend, University of Florida

2:25 PM-2:30 PM Panel Conclusion

3:15 PM-3:20 PM Household Hazardous Waste/BOPAE Panel
Moderator David Sutton, TDEC, opens the discussion

3:20 PM-3:45 PM Ethanol and Sugar Recycling

A review of Dynamic Recycling's new Bristol, TN facility that focuses on the recycling of ethanol and

sugar based wastes.

Brian W. Potter, Dynamic Recycling LLC.

3:45 PM-4:10 PM Temporary HHW Containers, Convenience to the Citizens

Temporary HHW containers (THHWC) are options for counties and municipalities looking to have a

year round location. The convenience meets Objective 2 and 7 of the 2025 plan.

**Bob Fletcher**, TDEC - Division of Solid Waste Management

4:10 PM-4:35 PM Charge Up Safety: Addressing Lithium Battery Management

Call2Recycle will provide insight on why lithium based batteries are causing safety and fire issues

and suggest steps to address their proper management and recycling.

**Timothy Warren**, Call2Recycle, Inc.

4:35 PM-4:45 PM Session Close

7:00 PM-9:00 PM Networking Reception at the Tennessee Aquarium







Room 9-10





# 1:10 PM-1:35 PM 1:35 PM-2:00 PM 2:00 PM-2:30 PM 2:30 PM-3:15 PM 3:15 PM-3:55 PM **Justin Micah Meredith**, TDEC - Division of Remediation Vapor Intrusion Mitigation Technologies & Trends for Brownfield 3:55 PM-4:35 PM Redevelopment Learn about the vapor intrusion mitigation technologies available for new construction and existing building scenarios. Jordan Kleine, MPA, Land Science **Session Close** 4:35 PM-4:45 PM **Networking Reception at the Tennessee Aquarium** 7:00 PM-9:00 PM

Thursday, Ma	ay 17 Air Quality Ro	oom 12
1:00 PM-1:10 PM	Moderator Amy Katcher, TDEC, opens the session	
1:10 PM-2:30 PM	Updates on NSPS XXX/Cf Implementation and Compliance This presentation will provide an understanding of what facilities are impacted by the NS Cf rules, what must be done to initially comply with these rules, how facilities must chan operations, and what hurdles the landfill industry still faces with respect to these new rulule Hall, Cornerstone Environmental Group	ige their
2:30 PM-3:15 PM	Ice Cream Social in the Exhibit Hall - Sponsored by HEPACO	
3:15 PM-3:55 PM	Permits by Rule and General Permits Discussion of Permits-by-Rule and General Permitting, new permitting options for certai groups. How do they work, what advantages they have, and who can use them. Donovan Grimwood, TDEC - OEA Small Business Environmental Assistance Program	in industry
3:55 PM-4:35 PM	<b>EPA Memorandums from Scott Pruitt</b> Discussion of recent memorandums from EPA that clarify or change former policies affe permit holders. <b>Lem Stevens</b> , Stevens Environmental Consulting	ecting
4:35 PM-4:45 PM	Session Close	
7:00 PM-9:00 PM	Networking Reception at the Tennessee Aquarium	

#### 1:00 PM-1:10 PM Moderator Mary Anderson, SWANA, opens the session

# 1:10 PM-1:50 PM Going Green and Saving Green: The Environmental and Financial Benefits of Exposed Geosynthetics

Landfills face many environmental and financial challenges. Learn how exposed geosynthetics can help you operate greener and save you money! **Ryan Kamp**, Chesapeake Containment Systems, Inc

#### 1:50 PM-2:30 PM Land Application Requirements for Residuals with Pathogens and Vectors

An overview of land application requirements for various residuals that contain pathogens and vectors, such as biosolids and food processing wastes.

Robert G. O'Dette, TDEC - Division of Water Resources

Serena A. Broska, TDEC - Division of Solid Waste Management

#### 

## 3:15 PM-3:55 PM Electrical Leak Detection for Landfill Liner Geomembranes

Introduction to Electrical Leak Location. A guide for planning and preparing for Electrical Leak Location. A description of each test method, equipment, advantages and disadvantages, highlighting projects and results.

Andrew Allen Colby, Bunnell - Lammons Engineering, Inc.

# 3:55 PM-4:35 PM Case Study on Use of Passive Soil Gas Sampling Devices to Delineate VOC and TPH Groundwater Impacts

Passive Soil Gas (PSG) methods were used at/near a closed landfill site to identify an off-site contaminant source(s) and to delineate groundwater impact areas.

Michael Hirt, PG, Environmental Information Logistics, LLC

Andrew J. Querio, PE, CPESC, EIL (Environmental Information Logistics)

4:35 PM-4:45 PM Session Close

7:00 PM-9:00 PM Networking Reception at the Tennessee Aquarium

# **Eco-Friendly Advancements**

Conferences are not known for being the most environmentally-friendly activities, and neither is golfing, but the State of Tennessee is making great strides to change that!

The Harrison Bay State Park which hosted our Show of the South Golf Tournament on Tuesday, May 15, is known for more than just their Eagle Cam (harrisonbayeaglecam.org); their signature Jack Nicklaus designed



Bear Trace golf course has a reputation for being even greener than the color of their fairways! They are certified with the Audubon Cooperative Sanctuary Program for Golf and the Golf Environment Organization (GEO), as well as being a Groundwater Guardian Green Site.

Harrison Bay is located on 40 miles of the Chickamauga Lake shoreline, and the careful management of this golf course has a direct correlation with its amazing wildlife's ability to thrive.



TDEC would like to make the Show of the South just as green as the golf course! Our 2025 Solid Waste Management Plan encourages the reuse, composting, and beneficial use of organics and sets a goal for expanding education and outreach concerning waste reduction, recycling, and composting programs to the public. What better place to see these goals in action!

We've made sure to source eco-friendly swag, and our tote bags, lanyards, and padfolios are all made with recycled materials. But one of the biggest challenges for an event like this is the amount of trash generated! They say the average conference attendee generates about 61 pounds of waste per day, compared to an 13.5 pounds produced by the same person at home.

We've hired Atlas Organics to collect and compost



our food waste! All of our leftover or scrap food (except raw meat) will be collected and composted, as well as things like napkins, wood coffee stirrers and compostable cocktail straws!

**Networking Reception at the Tennessee Aquarium** 

Thursday, May 17	Environmental Law	Room 18-19
1:00 PM-1:10 PM	Moderator Karen Simo, TDEC, opens the session	
1:10 PM-2:30 PM	Tweets in the Air 2 A presentation to update topics from last year's program covering changes from the Trump/Pruitt EPA under the Clean Air Act to the Clean Power Plan and more. Steven R. Stout, TDEC - Office of General Counsel Khurshid K. Mehta, TVA	
2:30 PM-3:15 PM	Ice Cream Social in the Exhibit Hall - Sponsored by HEPACO	
3:15 PM-4:35 PM	Chattanooga Brownfields: The Encore Mystery Tour Join us for classroom discussion of the legalities of the Brownfield process and (if approved) an encore mobile mystery tour of some nearby brownfield sites that have contributed to the Chattanooga renaissance.  David C Higney, Grant Konvalinka + Harrison, PC Troy Keith, PG, TDEC - Division of Remediation Evan Spann, TDEC - Division of Remediation Karen Stevenson Simo, TDEC - Office of General Counsel Michael C. Mallen, Miller & Martin PLLC	
4:35 PM-4:45 PM	Session Close	
7:00 PM-9:00 PM	Networking Reception at the Tennessee Aquarium	

7:00 PM-9:00 PM

## **Closing Plenary Session**



7:30 AM-8:15 AM 8:15 AM-8:20 AM

**Good Morning!** 

Patrick J. Flood, PE, Director, TDEC - Division of Solid Waste Management

Breakfast available in Meeting Room

8:20 AM-8:50 AM

**Legislative Update** 

A review of legislative initiatives considered during the second session of the 110<sup>th</sup> Tennessee General Assembly that addressed environmental, conservation, and energy policy issues.

Alexa Witcher, TDEC - Office of General Counsel Mallorie Kerby TDEC - Office of General Counsel

Feedback Drawings
We want to hear from everyone—
attendees, exhibitors, speakers

attendees, exhibitors, speakers, moderators, booth workers—what did you think about the Show?

Turn in your Feedback Survey at On-Site Registration, the Exhibit Hall Break Area, or the collection box in the Closing Session.

To thank you for helping us continue to improve, your feedback survey will also act as your entry into a prize drawing! The Exhibitor Drawing will be part of the Ice Cream Social, and the Attendee Drawing will take place during the closing session on Friday. You must be present to win!

8:50 AM-9:10 AM

**TDEC Bureau of Environment Update Tisha Calabrese Benton**, Deputy Commissioner, TDEC Bureau of Environment

9:10 AM-10:50 AM

**Region 4 State Panel Discussion** 

State regulators will highlight the work their states are doing and comment on some of the issues important to all Region 4 states. Topics of discussion may include Coal Combustion Residuals Management, Generator Improvement Rule Impacts, and PFAS Issues and Future Initiatives.

10:50 AM-11:00 AM

11:00 AM

Closing Remarks
Patrick J. Flood, PE

**Conference Adjournment** 

MARK YOUR CALENDARS: THE SHOW OF THE SOUTH RETURNS TO CHATTANOOGA MAY 15-17, 2019











#### **A&D Environmental Services (208)**

...... adenviro.com A&D Environmental, Inc. provides a diverse range of responsible, accountable services that reduce risk and deliver peace of mind to the customers, communities, and consultants we serve. Our diverse range of environmental services include: Industrial Services, Remediation, Waste Management, Emergency Response and Transportation.

#### A.E. Drilling Services, LLC (310)

aedrilling.com A.E. Drilling Services, LLC is a SBA-certified Economically Disadvantaged Woman-Owned Small Business (EDWOSB) based in Greenville, South Carolina. We have been providing national clientele high-quality environmental, geotechnical, and mineral exploration drilling services throughout the southeast since 1969. Our capabilities include auger, air rotary/air hammer, mud rotary, and DPT drilling.

#### **Action Environmental (818)**

..... actn.com Action Environmental provides environmental services and industrial services which have a broad application across many industries. Additionally, we provide specialty services which include industrial painting and coating, pipeline and terminal services, rail

car services, and remediation services.

#### **Advanced Environmental Services, Inc. (304)**

......AdvancedEnvironmental.com

AES provides remediation equipment sales, rentals and services. With over 150 systems in our fleet, we have the largest in-house selection of mobile remediation systems available. We also offer a huge selection of remediation system components and environmental instruments.

#### **AECOM (509-608)**

.....aecom.com Our environmental services help industrial and public sector clients around the world balance growth with resiliency — achieving compliance and reducing, or eliminating, risks while protecting our natural environment.

#### AGRU America, Inc (702)

.....agruamerica.com

Since 1988, Agru America, Inc. has been the world's leading manufacturer of flat die extrusion geomembranes, geonets, geocomposites, geotextiles and geosynthetic clay liners. Agru is part of Alois Gruber GmbH, an Austrian family-owned business since 1948 with production facilities in Austria, the U.S., Germany, China and India, and distribution in over 80 countries worldwide.

#### **Air Dynamics Testing (130)**

.....airdynamicstesting.com

The Trusted Name in Source Testing, Air Dynamics Testing provides high quality, cost effective source testing solutions along the I-65 corridor. For more information on the testing we provide, give us a call at 1-855-839-8378 (TEST).

#### Air Water & Soil Laboratories, Inc. (211)

......awslabs.com

Air Water & Soil Laboratories, Inc. is a full-service laboratory specializing in the analysis of environmental samples. With over 20 years of experience in servicing a wide range of industries, AWS offers data of the highest quality and excellent customer service. Please visit www.awslabs.com for more information about our services and capabilities.



**Exhibitor Directory** 

#### **AmCon Environmental (808)**

..... www.amconky.com AmCon Environmental has been a leading manufacturer of alternate daily

covers since 1988. Our tarps are easy to deploy, save air space and time. We build the toughest tarps possible and offer same day shipping on stock items while custom tarp orders are processed promptly and to your design.

#### American Lamp Recycling LLC (711)

......americanlamprecycling.com

#### **Arcadis (305-404)**

.....www.arcadis.com/en/united-states/ Arcadis is the leading global Design & Consultancy firm for natural and built assets. Applying our deep market sector insights and collective design, consultancy, engineering, project and management services we work in partnership with our clients to deliver exceptional and sustainable outcomes throughout the lifecycle of their natural and built assets. Arcadis. Improving quality of life. www.arcadis.com.

#### ATC Group Services (231)

......ATCGroupServices.com

ATC is a national provider of integrated environmental consulting and engineering services. We offer comprehensive expertise in air, land, and water combined with full design, project management, and implementation services to handle any challenge from consulting to completion.

#### **Aulick Chemical Solutions (128)**

.....aulickchemical.com

Aulick Chemical Solutions is a regional leader providing custom solutions to clean water and control odor. Public utility sector with wastewater and drinking water treatment and private industry with manufacturing, processing, and rendering facilities, Aulick has the experience to design custom solutions specific to your application. We're willing to go the extra mile to clean water or prevent hydrogen sulfide, odor, and corrosion for your utility or company.

#### A-Z Solutions, Inc (105)

......vaporremoval.com A-Z Solutions is the recognized leader in vapor intrusion mitigation. Our innovative system designs coupled with environmentally sustainable technology ensures our VI systems will be delivered on time, on budget and with optimal results. A-Z follows a solid foundation of basic principles: Environmental stewardship,

exceptional customer service and strong business ethics.

#### **Bakers Waste Equipment Inc. (522)**

......bwe-nc.com Founded in 1981 with a vision to manufacture and provide waste handling equipment to the hauler and municipality network. After decades of success and growth, BWE continues to investment in its core products which include steel front load containers, roll off containers, heavy duty industrial containers, hoppers, trailers, recycling containers, and an innovative line of Pinnacle Compactors that is rapidly gaining market share and awareness.

#### **Barge Design Solutions (512)**

...... bargedesign.com

Barge Design Solutions provides permitting and design services for municipal and industrial solid waste landfills. Barge's environmental staff perform ecological services such as wetland delineations, stream determinations, endangered and threatened species surveys, and restoration and mitigation design and monitoring.

## **Exhibitor Directory**

#### **Bartlett Controls (715)**

.....bartlettcontrols.com Manufacturers representative

#### **Beacon Environmental Services (323)**

.....beacon-usa.com BEACON provides the highest quality soil gas and air monitoring data in the industry using time-integrated, sorbent samplers to collect samples over days or weeks. This advanced capability used throughout TN for the past 17 years enables our clients to collect more accurate data and win projects.

#### **Blackhawk Technology Co (410)**

......blackhawkco.com Blackhawk is the leading provider of reciprocating piston pumps for brownfield & groundwater remediation, recovery of coal tar, creosote, oil & other hydrocarbons, unknown chemicals. Top-headdrive motors & power at grade, safely & cleanly outside well/sump. Cost-effective pneumatics, electrics & solars pump any fluid at any angle, require less maintenance, non-polluting.

#### **Bunnell-Lammons Engineering, Inc. (BLE) (830)**

.....blecorp.com Based in Greenville, SC with an office in Asheville, NC, BLE provides geotechnical, hydrogeological and construction CQA and testing services for solid waste landfills across the southeast. BLE provides a wide range of services for hydrogeologic siting evaluation, geotechnical engineering investigation, construction quality assurance, groundwater and landfill gas monitoring, groundwater quality statistical analysis, and storm water plans.

#### Blue Tank and Pump Rental (631)

......bluetankandpump.com Blue Tank and Pump Rental is more than just your rental company but your entire liquid solution. We provide liquid storage and transfer solutions for customers of all sizes, in all industries, and all processes with specific solutions designed to your specific needs. We provide the best equipment, best service and best people to provide the best, most economical solution to your liquid needs.

#### **Caraustar Recycling (112)**

...... caraustar.com Caraustar Industries, Inc. is one of the largest integrated manufacturers of 100% recycled paperboard and converted paperboard products. Caraustar serves the four principal recycled boxboard product end-use markets. Our recycling division works with generators of cardboard and paper materials to supply our paper mills with a continuous stream of recycled fibers.

#### Cascade (618)

...... cascade-env.com Cascade is the leading provider of environmental and infrastructure drilling, in situ remediation applications, and high resolution site characterization technologies. Our collaborative approach, high quality service, reliable crews, and leading safety program make Cascade the first choice in environmental services.

#### **Champion Windows and Home Exteriors (833)**

getchampion.com Home Exteriors Company

#### **Chase Environmental Group (505)**

......chaseenv.com

Environmental field services.

Groundwater remediation system construction/O & M; Bioremediation injection, dual phase extraction; monitoring well installation, direct push services, radiological decontamination and decommissioning.

#### Civil & Environmental Consultants, Inc. (605)

......cecinc.com

CEC provides engineering and consulting services for the management and disposal of municipal, construction/demolition, residual, hazardous, and gas exploration wastes, as well as coal combustion residuals. Our environmental professionals have extensive experience with regulatory compliance and industry management practices.

#### **Clarke Power Services (627)**

......clarkepsi.com Clarke Power Services is a commercial vehicle maintenance provider with an outstanding 50+ year track record of delivering value to the transportation and service industries. Clarke offers a comprehensive portfolio of services, or can customize solutions. Our commitment is to keep your assets working by delivering great service and to keep your equipment lifecycle costs on track.

#### Clean Earth, Inc. (419)

......cleanearthinc.com

Clean Earth is one of the largest specialty waste companies in the U.S. providing remediation, disposal, recycling, and beneficial reuse solutions for contaminated soil, dredged material, and hazardous and non-hazardous wastes. It is our unique capability of providing a one-source, full-service solution to handle multiple waste streams from a single customer that separates us from the competition.

#### Clean Harbors/Safety-Kleen (609-708)

......cleanharbors.com For more than 35 years, Clean Harbors has been providing comprehensive hazardous and non-hazardous waste management services to meet the needs of customers throughout North America. Leader in providing response services for environmental emergencies of any scale on land or water.

#### CMI Equipment Sales, Inc. (709)

......cmiequip.com

Providing equipment, parts and service to waste industry management for three decades.

#### CodePal Toolkit (811)

......codepaltoolkit.com Codepal is a Mobile Inspection and Permit Software Solution. We are designed to fit your way of working by adapting easily to a variety of industry standards. We pride ourselves on partnering with our clients, working together as a team to provide solutions that fit your needs and ease your workload.

#### Company Wrench Ltd. (528 - equipment 532)

......companywrench.com Company Wrench is a Heavy Equipment Sales, Rental, Service and Parts Company providing The Cutting Edge of Customer Service with a complete Dust Suppression product line. Our diesel selfcontained product is great for evaporation, dust, odor, fire control, alternative daily cover in many markets.

#### **Consolidated Pipe & Supply (820)**

.....www.consolidatedpipe.com Consolidated Pipe & Supply Co. distributes pipe, valves, & fittings from 42 locations located in 20 states. We offer a full line of HDPE fittings, pipe, and fusion machines.

#### **CTEH®**, **LLC** (826)

...... cteh.com

**Exhibitor Directory** 

Center for Toxicology and Environmental Health, LLC (CTEH®) is a science-based environmental consulting firm established to provide toxicology and human health consulting. CTEH® provides highly technical and highly responsive professionals to evaluate and develop solutions to a wide variety of human health and environmental issues.

#### CTI Engineers, Inc. (414)

......ctiengr.com

CTI Engineers, Inc., is an employee-owned consulting firm specializing in engineering services for waste management, water, wastewater, and site development. Organized in 1991 in Chattanooga, TN, with 15 employees, CTI now has over 50 employees and offices in three states, serving municipal, commercial, and industrial clients.

#### **D&L Safety Services, LLC (321)**

.....www.dandlsafetyservices.com D&L Safety Services, LLC is a professional safety contracting company providing on-site safety professionals qualified for the specific needs of our clients, as well as on-site safety training, throughout the united states.

#### **Directional Technologies, Inc. (303)**

......directionaltech.com Whether it is your first horizontal well installation, or you have experience with the technology, Directional Technologies, Inc. is here to help you exceed your clients' expectations. Our master drillers, geologists, and engineers have installed over 1,000 horizontal wells in the last 25 years, and we have successfully utilized horizontal directional drilling technology at many projects originally thought to be unfeasible. Visit us at booth #303.

#### EarthCon Consultants, Inc. (132)

earthcon.com Environmental Consulting, Engineering and Remediation

#### Eco Rental Solutions (832)

..... eco-rentalsolutions.com Eco Rental Solutions Rents & Sells field test installations

#### ECS Southeast, LLP (713)

...... www.ecslimited.com ECS environmental services include providing clients with a comprehensive understanding of the environmental aspects of a project and their impact on overall project requirements. ECS also provides geotechnical, construction materials and facility services. For more information and office listings, visit: www.ecslimited.com.

#### **EDR (311)**

.....edrnet.com

Our mission is to promote the environmental consulting industry and fill the needs of environmental consultants and engineers; we are committed to the success of the industry. From our flagship Radius Map Report-which has been used in more than six million environmental due diligence investigations-to our Due Diligence at Dawn seminar series, to our time saving workflow technologies, EDR is dedicated to the environmental consulting industry.

#### **ENERG3 (413)**

..... enerG3.us EnerG3 develops energy projects in the industrial, commercial, and municipal sectors, that reduce operating expense with affordable efficiency solutions (lighting, HVAC, Solar, CHP, EV Charging, UPS). Not only do we consult, design, engineer, procure, and construct, but we also approach sustainability projects from a strong financial position and assist our customers with obtaining "free" capital in the form of federal and local incentives.

#### EnSafe Inc. (514)

..... ensafe.com Creative thinking, custom solutions - that's what EnSafe provides to both industry and government clients when it comes to EHS challenges. Our coast-to-coast professionals deliver environmental, engineering, health and safety and technology solutions for the toughest issues.

# enterprise oii (405-504)

## Enterprise Oil (405-504)

Enterprise Oil, est. 1984, is a family-owned and operated

used oil recycling company in the Southeast. We are flexible in our services, innovative in our solutions and committed to environmental sustainability by custom building programs to be the best solution for non-hazardous waste management needs including zero-landfill and industrial services.

#### **Environmental Enterprises (828)**

..... eeienv.com Environmental Enterprises Inc. (EEI) is a full service Treatment, Storage and Disposal facility. EEI was founded in 1976 to service the greater Cincinnati, OH area and has expanded to cover the east and southeast with service centers in PA and VA. EEI provides a full line of disposal services to a diverse clientele in industry, government and academia. Lab Packing, precious metals recovery, aerosol can disposal and hazmat removal are a few of our specialties.

#### **Environmental Management Specialists, Inc. (213)**

......EMSonsite.com EMS is a professional environmental contractor specializing in remediation, emergency response, and environmental services with service centers across the Midwest, Mid-Atlantic, South-Central United States, and beyond to serve our customers including transportation companies, energy companies, environmental consultants, industrial facilities, environmental service companies, general contractors, property owners, and the public sector.

#### **Environmental Specialties International, Inc. (315)**



..... esiliners.com With more than 2 billion square feet of installed geosynthetic lining materials and 2,000 projects completed throughout the United States, ESI is a leader in geosynthetic installation services for the solid waste industry.

#### **Environmental Standards (409)**

.....envstd.com Environmental Standards, Inc. is a privately-held environmental consulting firm specializing in chemistry quality assurance, environmental analytical laboratory auditing, consulting geosciences, third-party field auditing, and information management. Local office in Knoxville, TN.

#### **Environmental Risk Information Services (428)**

.....erisinfo.com

**Environmental Data For Properties in North America** 

## **Exhibitor Directory**

#### ESC Lab Sciences (728)

ESC Lab Sciences, a subsidiary of Pace Analytical, is one of the largest environmental analytical facilities in North America. ESC offers a full service analytical suite to meet our customers' diverse monitoring and characterization support needs including traditional soil, groundwater, wastewater, drinking water and TCLP along with air/vapor intrusion and radiochemistry.

#### **ETEC, LLC (403)**

etecllc.com
ETEC, LLC is a national provider of bio-focused remediation
technologies that include soluble bioproducts and specialized
recirculation equipment for soil and groundwater remediation.

#### **Excel TSD of Tennessee, LLC (819)**

Hazardous Waste T/S/D/F

.....exceltsd.com

#### **Frost Environmental Services, LLC (412)**

..... frostenvironmental.com

We are a full service environmental consulting firm specializing in asbestos, lead based paint, indoor air quality, industrial hygiene services.

#### **Gatlinburg Crafts (134-136)**

The Craft Booth will feature pottery from Fowler's Clayworks and McAvoy Pottery both functional and decorative. Also featured will be sterling silver, mixed metal, real gemstone, and pearl jewelry from Gabriel's Horn Jewelry.

#### **GEL Geophysics (228)**

GEL Geophysics, LLC provides subsurface utility engineering (SUE), land surveying, and geophysical services. With 6 offices and nearly 50 employees strategically located throughout the Southeast, we are able to accommodate any size project for both public and private sector clients throughout the United States.

#### **Geo Lab Drilling (313)**

geolabdrilling.com

## GeoSearch (511-610)

.....geo-search.com

GeoSearch provides customers with fast, accurate, constructive information to help assess and manage environmental risk. GeoSearch is a complete source for all environmental due diligence needs including ASTM Environmental Database Reports, Historic Aerials, City Directory Research, Fire Insurance Maps, Lien and Title Search Investigations and more all in one place.

#### **Geosyntec Consultants (520)**

Geosyntec Consultants is a consulting firm with engineers, geologist, environmental scientist, and other technical and project staff based in offices throughout the United States and at selected locations in Australia, Canada, Ireland, Malaysia, and the UK. We address new ventures and complex problems involving our environment, natural resources, and civil infrastructure.

#### Geo-Synthetics Systems (GSI)a Babcock Power Inc. company (703)

In business for over 40 years, Geo-Synthetics Systems (GSI)- a
Babcock Power Inc. company is a distributor, fabricator, and
installer of geosynthetic materials for a broad range of erosion
control and containment applications for landfill sites, construction
sites, road construction projects and contaminated waterways.

#### Geotechnics, Inc. (727)

.....geotechnics.net

Geotechnics has been at the forefront of geotechnical and geosynthetic testing for over 30 years. In working with numerous consultants and engineers, Geotechnics understands the challenges associated with complex testing programs for Landfill Designs, Ash Storage Facilities, Dam Construction and more. CQA field services as well as electrical leak location services.

#### **Golder Associates Inc. (822)**

Golder is an environmental and engineering industry leader in ground engineering, soil/rock mechanics, and environmental services for mining, manufacturing, power, oil & gas, design and infrastructure industries. Golder has completed some of the largest and most complex environmental and geotechnical engineering projects in the Southeast.

#### Hannah Solar (526)

Hannah Solar is a full service, certified solar integrator and licensed electrical contractor dedicated to providing the very best in engineering, products, installation and servicing of solar arrays, battery storage systems, EV charging station equipment and backup generators.

#### Hawkston, LLC (615)

......hawkston.com
Environmental Drilling Services

## HEPACO, LLC (500)

hepaco.com
HEPACO, LLC is a specialty environmental contractor. Facility
Decontamination, Asbestos/Lead Abatement, Remediation Services,
Hazardous Material/Labpack Services and Emergency Response
clean-up are a few of the services we are proud to offer our present
and future clients.

# **HEPACO**

## Heritage Environmental Services (602)

Serious experience for serious times heritage-enviro.com
Heritage provides the best-in-

class capabilities for all of your waste service needs, including emergency response, incineration, fuel blending, landfill, inorganic waste and wastewater treatment, recycling, transportation and data tracking. We are committed to continued customer service excellence and exceeding your expectations.

#### **Highland Technical Services, Inc. (629)**

......htsienv.com Founded in 1998, Highland Technical Services, Inc., is a full service environmental and geosciences consulting firm. We have years of experience in anticipating, identifying, and addressing a wide range of concerns for clients across the United States. Our clients include, but are not limited to: foundries, hazardous waste generators, solid waste landfills, lending institutions, underground storage tank owners and state and local government entities.

#### **Hole Products (508)**

......holeproducts.com Hole Products is a global leader in providing high performance drilling supplies, tools and equipment to the construction, direct push, environmental, geotechnical, geothermal, HDD, mineral exploration, rotary, sonic, and water well drilling industries. Check out the drilling industry's leading ecommerce solution at www.holeproducts.com

# Innovative Environmental Technologies, Inc. (420-

.....IET-INC.net

**Exhibitor Directory** 

Innovative Environmental Technologies, Inc. (est. 1998) is a technology vendor and remedial contractor. IET holds 11 patented technologies that have been used in over 1800 remediation projects across the United States and Canada. IET also has an Environmental Drilling division with licenses in 15 states.

#### In-Situ, Inc. (109)

.....in-situ.com For 30 Years In-Situ, Inc. has been the leader in water level and quality datalogging sensors for landfill leachate, mining, aquifer characterization and remediation. We manufacture, sell, rent and long-term lease loggers, meters and remote monitoring systems for all your project needs.

#### **Integrated Tech/Aquashield (807)**

Integrated Technologies represents AquaShield water quality units, Lane HDPE, PP, and CMP and Cultec underground detention chambers. Call us for all your stormwater needs: 615-738-6217.

#### iSi Environmental (835)

.....isienvironmental.com **EHS Consulting** 

#### iSustain Inc (732)

.....isustainrecycling.com Solid/Liquid Waste & Recycling

#### Jerry White Magical Entertainment (131)

.....jwhitemagic.com JWME has been providing quality environmental education in the southeast for more than 20 years.

## Jim's Tank Service, LLC (510)



.....jimstankservice.com Jim's Tank Service, LLC is celebrating 50 years of business. Services include Haz and Non-Haz transportation, emergency response (OSRO), industrial services, roll-off, oil recycling and wastewater treatment. We perform these services along with our sister companies, ATM Oil Co., Inc. an EPA

registered recycling facility and Wastewater Solutions, LLC, a permitted centralized waste water treatment plant.

#### K.S. Ware & Associates, LLC (519)

.....kswarellc.com K. S. Ware and Associates provides Geotechnical services, Environmental Consulting, Construction Engineering and Inspection, Special Inspections and Hazardous Materials consulting. We support to A/E firms in the Transportation (highways and airports), Federal and Municipal Agency market segments.

#### Kenvirons, Inc. (920)

.....kenvirons.com Kenvirons is a Civil and Environmental Consulting Firm located

in Frankfort, KY. Specializing in Solid Waste design, permitting, CQA, surveying, environmental monitoring, air permitting and air emissions testing. Other areas of expertise are water treatment systems and distribution, wastewater treatment systems, Phase I & Il site assessments and SWP3 & SPCC Plan preparation.

#### LaBella Associates-Joyce Engineering (411)

.....labellapc.com Since 1983, Joyce has specialized exclusively in responsibly serving the solid waste industry for both public and private clients through engineering, environmental consulting, planning, permitting, and operational consulting and training. This year, JOYCE became a wholly owned subsidiary of LaBella Associates, DPC. JOYCE remains intact, and we are now part of a larger organization with even greater capabilities and geographic reach to serve our clients.

#### LDA Engineering (730)

.....ldaengineering.com Through our vision of Learn. Design. Act., we provide planning,

engineering, and geospatial information services helping communities develop solutions for infrastructure, public services, and environmental enhancements to build Stronger. Happier. Communities.

#### Lee-Smith, Inc (726)

.....lee-smith.com

The Southeast's largest locally owned commercial truck dealer for international-Ford-Isuzu trucks.

#### **Leidos (731)**

.....leidos.com

Leidos is a diversified consulting firm with offices across the country and throughout Tennessee (Oak Ridge, Hendersonville, Memphis and Livingston). Leidos routinely tackles some of our nation's biggest civil and environmental issues with a focus on cost effective customer support.

#### Leister Technologies (603)

.....leister.com

Leister Technologies (www.leister.com) is the worldwide leader in plastic welding and hot air equipment. Our products include automatic welders, wedge welders, extrusion welders and testing tools – everything a geomembrane installer might need.

#### **Liberty Tire Recycling (804)**

libertytire.com

Liberty Tire Recycling is the premier provider of tire recycling services in the U.S. By reclaiming more than 33% of the nation's discarded tires, Liberty Tire annually transforms more than 140 million tires into raw materials for smart, sustainable products that improve people's lives. Liberty Tire is a revolutionary American conservation enterprise - from whole tire to end product.

## **Exhibitor Directory**



## Mationwide Recycler of Bulbs Ballasts, Batteries, & More

#### **Lighting Resources LLC (721)**

Lighting .....lightingresourcesinc.com Resources Recycler of Universal Waste Lamps, Batteries, E-Waste, Automotive Airbags/ Seatbelts, and Mercury Containing Equipment. We also provide total

destruction via Shredding of sensitive material (hard drives, data holding devices, and OEM parts). Nationwide coverage with processing and service locations in Johnson City, Nashville, and Memphis, TN and Kennesaw, GA.

#### Lion Technology Inc. (110)

.....Lion.com Lion Technology designs and delivers training to help industry professionals maintain compliance with Hazmat, Hazardous Waste, and Environmental Safety Regulations. Training includes classroom instruction; on-site programs; online courses; and live, instructorled webinars. Every student receives access to expert instructors, online regulation updates, exclusive resources, and more.

#### **Lipscomb University (821)**

.....sustainability.lipscomb.edu The Southeast's first comprehensive undergraduate and graduate program in sustainability, we equip leaders with business, natural and social science skills to create lasting solutions to modern environmental challenges. The Institute offers an MS in Sustainability (16 months), a Certificate of Graduate Studies in Sustainability (6 months), and Dual MS/MBA degrees (2 years)- on campus and online options available.

#### **Lord and Winter (815)**

lordandwinter.com Lord and Winter is a team of professional environmental scientists serving in the mining, commercial/industrial development, and utility marketplaces by providing environmental permitting, environmental compliance, and environmental remediation services.

#### Marion Environmental, Inc. (918)

......marionenv.com Marion Environmental, a full service environmental company, with offices in Chattanooga, Knoxville, Nashville, and Tri-Cities, TN, and in Dalton, Atlanta, Charlotte, and Birmingham. Marion's services include consulting, emergency response, industrial services, waste management, and transportation of hazardous and non-hazardous

#### McCray Drilling, LLC (837)

...... mccraydrilling.com **Environmental Drilling and Direct Push Services** 

#### McNeilus Companies (429 - equipment 433)

......mcneiluscompanies.com

McNeilus Truck & Manufacturing is an industry leader in refuse truck bodies. Our product lineup gives you more options for rear-, side- and front-loading vehicles that fit your needs. McNeilus CNG also leads the way in alternative fuel systems and custom installations, plus a full-range of services and system support.

#### **Mobile Mini Tank & Pump Solutions (604)**

......www.mobilemini.com

Mobile Mini Tank and Pump Solutions are providers of temporary liquid and solid storage solutions, pumps, and filtration systems. We also offer Transportation Services for Non Hazardous liquid/ solid materials or waste.

#### MTSU (720)

......www.mtsu.edu/adcp Custom College Degrees for Water Professionals. You can: Design your own custom degree program; Finish your degree quickly by getting credit for your certifications, training, and military experience; Complete your degree completely online. Call (615) 494-7714.

#### Municipal Equipment, Inc. (705)

.....municipalequipmentinc.com Tennessee's new choice for refuse / recycling / compaction equipment from New Way, Galbreath, Marathon and Wastequip. Whether you want an automated side loader or on-site service we've got the reach.

#### NorthStar Contracting Group, Inc. (426)

NorthStar solutions company. Services include Environmental

...... northstar.com NorthStar is the world's most comprehensive environmental

Assessment; Remediation and Restoration; Emergency and Disaster Response; Water Resource Management; Program and Project Management; Construction and Civil Engineering Services; and Asbestos Abatement, Demolition, and Facility Decommissioning.

#### Northstar Environmental Group, Inc. (308)

......northstarenv.com

Northstar has focused our expertise on a core group of service lines selected to address the needs of our clients. Our core environmental service lines are: Due Diligence Services; Environmental Compliance; Stormwater Management; Site Remediation; Phase II Investigations; Drone Services; Brownfield Redevelopment Services.

#### Pace Analytical Services (729)

.....pacelabs.com Pace provides environmental testing of inorganic, organic and radiochemistry capabilities—specializing in the analysis of trace level contaminants in air, water, wastewater, soil, biota and waste. Throughout our 38 year history, clients have benefited from our commitment to data quality, timely turnaround times, excellent service and fair pricing.

#### Parratt-Wolff, Inc. (129)

.....pwinc.com Safe, reliable, good communications on the job site, innovative - all words our clients use to describe our field teams. Parratt-Wolff provides quality drilling, well rehabilitation and direct imaging services to all states on the East Coast.

#### Patriot Recycling (401)

...... patriotrecycling.co Patriot Recycling Inc. is a completely modern state of the art tire processing and recycling facility. We are proud to take scrap tires and turn them into beneficial end use tire derived products for power generation and use in infrastructure while promoting solutions for a cleaner environment.

#### Perma-Fix Environmental Services, Inc. (831)

......perma-fix.com

Perma-Fix Environmental Services, Inc. is a leading provider for the treatment, processing, and recycling of hazardous, nonhazardous, household hazardous, industrial, universal, medical/ pharmaceutical, and radioactive wastes. Following local, state, and Federal regulations, we offer a variety of services including SGQ/ CESQG collections, household hazardous waste mobile collections, fuels blending, and metals laden waste stabilization.

#### PeroxyChem (809)

......peroxychem.com/markets/environment/soil-and-groundwater

PeroxyChem's proven in situ chemical oxidation (ISCO), in situ chemical reduction (ISCR), and bioremediation technologies promote rapid and cost-effective treatment of a wide range of organic compounds and heavy metals. We have treated millions of liters of groundwater and more than ten million metric tons of impacted soils, sediments, and industrial process wastes.

#### Pine Environmental (233)

pine-environmental.com
Environmental Monitoring, NDT- RVI, CEMs, PPE Supplies

#### **Plastic Fusion Fabricators, Inc. (823)**

......plasticfusion.com

Geosynthetics, pipes, fabrications, installation

#### PM Environmental (722)

.....pmenv.com

PM Environmental, Inc. has over 25 years of experience in consulting and managing a wide variety of environmental, engineering, industrial hygiene, energy and development projects. Services include Risk Reviews, Transaction Screens, Phase I & II Environmental Site Assessments, Property Condition Assessments, Brownfield Redevelopment, and Underground Storage Tank Management.

#### Pointmap CAD & GIS Services (518)



POINTMAP provides CAD & GIS services that support environmental professionals. We manage your drafting and mapping details, so you can focus on higher billable tasks and more projects - for greater profitability. Extend your team by incorporating ours!

#### **Pratt Industries (202)**

Prattindustries.com
Pratt Industries USA is the world's largest privately owned corrugated manufacturing company. Headquartered in Conyers, GA, we are a vertically integrated company with successful collection, processing and paper mill operations. Pratt consumes the paper derived from recycling programs and produces 100% recycled paper products at four modern mills here in the U.S.

#### **Provectus Environmental (418)**

Provectus Environmental.com
Provectus Environmental is a performance chemical provider to
the soil and groundwater remediation industry. We specialize in
the development and global commercialization of next-generation,
synergistic in situ chemical reduction (ISCR), in situ chemical
oxidation (ISCO), and bioremediation technologies. Our proprietary
remedial technologies represent the safest, most effective, and
most cost-efficient solutions available.

#### **Questar Solutions (330)**

...... questarusa.com

For over 25 years, Questar has been the leading single-source provider of UN rated Performance Oriented Packaging to the waste and industrial industry. Questar operates from 10 strategically located national warehouses to ensure our clients receive the highest level of service.

#### Ramboll (620)

**Exhibitor Directory** 

Ramboll is a leading engineering, design and consultancy company. Our globally recognized Environment & Health practice has earned a reputation for technical and scientific excellence, innovation and client service. We strive to achieve inspiring and exacting solutions that make a genuine difference to our clients, end-users and society at large.

#### Raven CLI (802)

Raven is a vertically-integrated full-service solutions provider of targeted products for the geosynthetics industry as a world-class manufacturer of advanced geomembranes, and design-build custom fabrication. We incorporate the latest technology to develop sustainable solutions that directly address hazardous containment, and promote stewardship in cleanup and

#### Republic Services, Inc. (600)

redevelopment of environmentally impaired sites.



#### **RES (111)**

RES is the largest dedicated provider of ecological solutions in the United States, providing high-quality, client-centric solutions. In total, we have reduced 250+ tons of nutrients; restored 290+ miles of stream, 58,024 acres of wetlands, and 9,100 acres of species habitats; and planted over 14 million trees.

#### **RKI Instruments, Inc. (521)**

RKI Instruments is an innovative gas detection company offering portable and fixed systems gas detection instruments. RKI is showing the latest in VOC gas monitoring. The GX-6000 is a 6 gas portable detector with the capability of monitoring with 2 different PID sensors in one instrument including benzene specific mode.

#### **Rockwood Recycling (810)**

Rockwood recycling is a company that focuses on wood recycling, shingle recycling, and tire recycling. Rockwood also has expanded into contract grinding and working with gasification and waste-to-energy projects.

#### **S&ME, Inc. (327)**

Smeinc.com
S&ME delivers common sense consulting services that create
economic value for our clients. Our environmental professionals
are focused on safely providing technically excellent services,
governed by unquestioned integrity, and aimed at cost-effectively
accomplishing our clients' objectives.

#### **SEFA (502)**

SEFA processes and markets environmentally sustainable products derived from fly ash for the concrete industry, recycling over 20 million tons of fly ash in the last 30 years. We are an integral part of some of the country's most successful coal ash recycling programs. SEFA is making a positive impact by cleaning up coal ash from ponds and removing it from the environment permanently.

#### **SEMS, Inc. (710)**

.....semsinc.net

**Environmental Consulting and Industrial Services** 

## **Exhibitor Directory**

#### Skytec LLC (423)

.....skytecllc.com Skytec is an ISNetworld qualified, professional UAV company that provides data collection and analysis, data management, and consultation services. Our turn-key operation is available to professional service firms and site owners anywhere in the world.

#### Smith Gardner, Inc. (801)

.....smithgardnerinc.com S+G is one of the nation's leading firms in the solid waste and environmental consulting industry. We incorporate our three 3R Strategy - Resource Management, Recovery and Remediation to optimize life cycle project benefits and deliver cost-effective, innovative solutions.

#### **SOLMAX-GSE (203)**

.....solmax.com or gseworld.com SOLMAX-GSE is a manufacturer of geosynthetic containment systems used in the waste management, mining, oil and gas, water and wastewater industries. Our HDPE-based products include geomembranes, geonets, geocomposites, GCLs, and geotextiles.

#### Southern Environmental Services (805)

.....southernenvironmentalservices.net **Environmental ER-Testing-Tank Removals** 

#### **Specialty Earth Sciences, LLC (714)**

...... sesciences.com Specialty Earth Sciences, LLC is the developer of SOCORE: Sustained Oxidation and Controlled Oxidant Release Encapsulants. SOCORE technology provides long term (on the order of years) reactive zones for plume reduction as well as interception of migrating contaminant frontal boundaries. SOCORE is ideally suited for sites with active operations or low permeability soils.

#### Stantec (814)

At Stantec, our work—professional consulting in planning, engineering, architecture, interior design, landscape architecture, surveying, environmental sciences, project management, and project economics—begins at the intersection of community, creativity, and client relationships. Stantec makes a long-term commitment to the people and places we serve.

#### **Stevens Environmental Consulting (229)**

.....stevensenvironmental.com

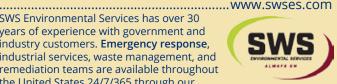
Excellence in EHS services, providing value through strategies you can trust

#### Stringfellow Inc. (329 - equipment 333)

.....stringfellow.bz Since 1934, Stringfellow, Inc. has provided Tennessee with the best refuse equipment available. HEIL, Gal-Fab, Pac-Mac, Toter... all to make collection and recycling more efficient and safer! Great Service, Great Equipment, and YOU! What a team!

#### SWS Environmental Services (503)

SWS Environmental Services has over 30 years of experience with government and industry customers. Emergency response, industrial services, waste management, and remediation teams are available throughout the United States 24/7/365 through our Response Hotline - 877-742-4215



#### **TANA North America by HUMDINGER (718)**

......humdingerequipment.com Compactors - Shredders - Trommels - Compost Turners

#### tarpARMOR (332 - equipment 137)



.....tarparmor.com tarpARMOR TDS by Southwestern Sales, a higher form of protection: Save airspace; Protect your

investment; Maximize tarp coverage; Minimize installation time; Improve performance in wind; High quality fabrics and construction; Patented technology.

#### Tarpomatic, Inc. (204)

.....tarpomatic.com Tarpomatic manufactures an automatic tarping machine designed for deployment and retrieval of alternate daily cover tarps over the active working face of landfills. Our machines have proven the test of time and extreme conditions for over 20 years. We are the only company that employs a removable arbor system, so only one

#### TDEC - Remediation (210)

machine is needed for even the largest of landfills.

.....tn.gov/environment/remediation The Division of Remediation identifies and investigates hazardous substance sites, then uses practical and effective remedies to stabilize, remediate, contain, monitor and maintain these sites. These efforts minimize threats to public health, safety, and the environment.

#### **TDEC Regulatory Staff (100-102)**



.....tn.gov/environment TDEC's technical staff is on site and wants **Environment &** to meet you! Come by our booth to find **Conservation** just the right person to discuss your

unique questions or comments and pick up your 100% recycled, Made in the USA conference tote bag, sponsored by our Office of Policy & Sustainable Practices.

#### **TDEC Small Business Environmental Assistance** Program (829)

.....tn.gov/environment/sbeap The SBEAP is a non-regulatory program within TDEC. Its purpose is to provide free, confidential, technical environmental assistance to small businesses for all their environmental questions.

#### TDOT Highway Beautification Office (104)

.....nobodytrashestennessee.com TDOT staff from the Highway Beautification Office is on site and wants to meet you! Come by our booth and see what we're doing to combat litter, from the Adopt-A-Highway Program to our new litter prevention campaign, Nobody Trashes Tennessee! Bring your questions and be sure to pick-up a free car litter bag, so that you can help us keep Tennessee roadways litter free!

#### TenCate Geosynthetics (704)

.....tencategeo.us TenCate Geosynthetics is the global leader in geosynthetics. Our geogrids and geotextiles are engineered with advanced application knowledge to meet project specifications for transportation construction, mechanically stabilized earth, erosion control, and water and waste management.

#### **Tennessee Tech University (108)**

......tntech.edu/is/ses/psm Tennessee Tech's School of Environmental Studies

#### Terracon (312)

.....terracon.com

**Exhibitor Directory** 

Terracon provides practical solutions to environmental, facilities, geotechnical and materials engineering challenges. With more than 140 offices nationwide, we provide local expertise backed up by national resources to achieve project success on time and on

#### **Tersus Environmental (302)**

.....tersusenv.com

Tersus Environmental researches, develops, and commercializes innovative soil and groundwater remediation solutions through university and professional relationships in order to meet the increasing technological demands at contaminated sites. Our proven technologies help our clients reduce uncertainty, minimize risks, and achieve cost-effective results.

#### TestAmerica Laboratories (415)

......TestAmericainc.com TestAmerica Laboratories, Inc. has developed an unprecedented combination of resources, experience and testing capabilities, with more than 2,000 industry professionals. TestAmerica focuses on refining methods that address current environmental issues and developing new solutions for challenges that the market and our clients anticipate facing in the future.

#### Tetra Tech (613)

.....tetratech.com

Tetra Tech is a leading, global provider of consulting and engineering services. We are differentiated by Leading with Science® to provide innovative technical solutions to global commercial and government clients. With more than 16,000 associates worldwide, Tetra Tech provides clear solutions to complex problems.

#### The Peterbilt Store North Georgia (633 equipment 632 & 637)

..... thepetestore.com Peterbilt North American Dealer of the Year (2004 and 2016) The Pete Store is network of Peterbilt truck dealerships spanning the Eastern US. Through our exclusive Peterbilt dealerships we offer sales of new and pre-owned trucks, truck parts, body shops, and truck service. The Pete Store is a respected dealer in the transportation industry with a track record for quality support.

#### **Tioga Environmental Consultants, Inc (611)**

.....tiogaenv.com

Tioga, based in Memphis, specializes in environmental regulatory compliance for manufacturing and industrial facilities; assessments such as Phase I, II, NEPA etc.; remediation (DCERP and UST Certified); hazardous building material assessments (lead, asbestos and other hazards); industrial hygiene and safety services and natural resource investigations (wetlands).

#### TIS Insurance Services, Inc. (827)

......TISINS.com

Insurance Broker



#### Titan Environmental USA (408)

.....titanenviro.com Titan Environmental USA specializes in prefabricated geomembranes for a variety of environmental containment projects.

Working with a range of materials we are your one-stop-shop for specialty product and custom panel fabrication. Contact us at 1-713-849-1311 or info@titanenviro.com

#### **TN Recycling Coalition (812)**

.....tennesseerecyclingcoalition.org

The Tennessee Recycling Coalition is a non-profit organization dedicated to promoting recycling and sustainable materials management practices in the state of Tennessee. TRC's annual conference will be held August 12-14, 2018 at Marriott's Franklin Cool Springs.



#### TN State Parks (103)

.....tnstateparks.com State Parks preserve and protect the unique natural, cultural and historic resources of our

ENNESSEE state. Learn more about Harrison Bay State Park, State Parks whose signature Jack Nicklaus designed Bear Trace golf course hosted the Show Golf Tournament on Tuesday!

#### **TN Volunteer Chapter of SWANA (813)**

.....swanachapters.org/tennessee

TN SWANA is a group of solid waste professionals who are committed to advancing the practice of economically and environmentally sound solid waste management in Tennessee.

#### **TPM Group (106)**

.....tpm-group.com

TPM Group is a full service environmental and emergency spill response contractor with offices located in Bowling Green, KY and Nashville, TN. Our personal are strategically located to ensure a prompt response to service requests throughout the Southeastern United States. TPM also owns a fleet of vacuum trucks, operates a solidification facility in Auburn KY and performs stormwater quality BMP / SCM inspections, cleanings and restorations.

#### Tradebe Environmental Services (328)

.....tradebeusa.com TRADEBE provides safe, quality, innovative environmental services that contribute to sustainable development and innovative solutions to ensure the appropriate assessment, treatment and elimination of wastes. As a global business dedicated to sustainable waste management, we seek the greenest waste solutions possible with a priority on recycling and recovery.

#### TriAD Environmental Consultants, Inc. (723)

..... triadenv.com

TriAD Environmental Consultants, Inc., provides innovative, costeffective solutions to environmental problems. Our expertise includes solid/hazardous waste management, RCRA/CERCLA permitting/remediation, hydrogeologic investigations, storm water management, hydrologic determinations, compliance assistance, SPCC Plan preparation, and environmental assessments.

#### Tricon Precast LTD (309)

.....triconprecast.com

Precast Concrete Manufacturer

#### Tri-State Drilling - Chattanooga (621)

......TSDrilling.com

A small business providing professional drilling services based in Chattanooga TN. (Nashville & Knoxville) Providing services in southeastern United States. Services include Geotechnical, Environmental, Mineral Investigation and Water Resources. Services in a Safe and Timely Manner.

#### TTL, Inc. (205)

.....ttlusa.com For more than 50 years, TTL's staff of over 350 technical and professional personnel across seven different offices has worked with clients nationwide. We currently serve the following markets: Analytical Lab Testing, Construction Materials Testing, Industrial, Energy, Transportation, Geotechnical Engineering, Environmental Consulting and Civil Engineering Design.

## **Exhibitor Directory**

#### **UA SafeState (712)**

..... alabamasafestate.ua.edu

UA SafeState Environmental Programs provides environmental training, compliance assistance, and sustainability support for industrial, commercial, residential and municipal environments.

#### **US Ecology (719)**

.....usecology.com

US Ecology is a leading provider of environmental service offering treatment, disposal and recycling of hazardous and radioactive waste, and complementary field and industrial services. For over 63 years, US Ecology has provided hazardous and non-hazardous waste treatment, RCRA/TSCA disposal. Services include ER, industrial cleaning, lab packing, remediation and transportation.

#### Valicor Environmental Services, LLC (209)

Industrial Waste Water Treatment & Oil Recycling

**Vapor Pin Enterprises, Inc. (319)** 

......Vaporpin.com The Vapor Pin® is a unique, patented, re-usable sampling device, and has a variety of applications, including sub-slab soil-gas sampling, de-pressurization studies/testing, stray gas evaluations, source area characterization, Pilot testing and mitigation progress monitoring. The Vapor Pin® allows you to collect quality, low-cost samples within minutes. Plus, it's made in the USA.

#### **Veolia (421)**

.....veoliaes.com

**Environmental Company** 

#### Waste Connections of Tennessee, Inc. (922)

.....wcnx.org Waste Connections of Tennessee, Inc. is a fully integrated solid

waste services company. We service commercial, industrial and residential trash and recycling customers, operating Class I landfills and transfer stations.

#### **Waste Industries (402)**

......wasteindustries.com

Waste Industries maintains an industry-leading approach to sustainable waste practices through efficient management of its resources and early adoption of technology. Through technologies such as our compressed natural gas fleets, our state of the art Diesel Hydraulic-Hybrid vehicles, and our gas to energy facilities at our Sampson County landfill, Waste Industries holds true to its mission of ongoing sustainable efforts in local communities.

#### Waste Management (523-622)

Waste Management is the leading provider of comprehensive waste management and environmental services in North America, serving residential, commercial, industrial, and municipal customers. We offer a broad portfolio of environmental solutions. Our subsidiaries provide collection, transfer, recycling and resource recovery, and disposal services, and we are a leading developer, operator and owner of landfill gas-to-energy facilities in the US.

#### **Watershed Geo (113-212)**

......watershedgeo.com Watershed Geo is a geosynthetics company specializing in erosion control, soil stabilization and waste containment technologies that are sustainable, low-cost and engineered to handle extreme weather. Watershed's products include ClosureTurf®, a final landfill closure system, VersaCap®, an intermediate landfill cover and HydroTurf®, an engineered revetment armoring system for storm water applications.

#### Waypoint Analytical (623)

...... waypointanalytical.com Waypoint Analytical believes scientifically sound, legally defensible analytical data is the most critical element for the success of an environmental project. We provide a superior standard of service, operate with an unwavering commitment to quality and our clients, provide services that follow the entire life cycle of a project, and utilize the latest and best technology for each project

#### WestRock (501)

.....www.westrock.com/recycling

WestRock Recycling & Waste Services is one of the largest integrated recyclers and non-landfill based waste consolidators in North America. We offer our customers solutions for their waste and recycling needs through customized programs dedicated to meeting sustainability goals, increasing recycling rates and decreasing waste costs.

#### **WiSE (230)**

WiSE is an affinity group comprised primarily of women with science or engineering degrees, or working in science or engineering positions. Our focus is to provide mentoring and networking opportunities for women with degrees or positions in science or engineering and to impact the awareness of young women and girls regarding science and engineering as professions.

## **Wood Environment & Infrastructure Solutions**

......woodplc.com

Wood is a global leader in the delivery of project, engineering and technical services to energy and industrial markets. We operate in more than 60 countries employing around 55,000 people. We provide performance-driven solutions throughout the asset lifecycle, from concept to decommissioning across a broad range of industrial markets.

#### **Worldwide Equipment INC (803)**

..... thetruckpeople.com

Our municipal specialists can provide trucks for all applications. Mack, Volvo, Kenworth, and Hino chassis are available. Exclusive NJPA financing! Make sure to ask about our Municipal Rotation Auction Program! Let us help you write your specs!

#### Worobey Transport Inc. (WTI) (839 equipment 641)

.....wti-tank.com

WTI offers a wide range of rental equipment for the environmental services sector. Frac tanks, sealed rolloffs, vacuum boxes, and dewatering boxes are a few of the products we offer to insure our client's success.

#### Wright Brothers Contracting, Inc. (427)

......wbcci.com WRIGHT Over the past thirty years Wright Brothers has been BROTHERS constructing landfills for both private owners and TION COMPANY, INC. public municipalities. We

understand the standards and specialized grading techniques that are required to construct landfills. Wright Brothers has proven time and time again that we can deliver a quality product while exceeding our client's expectations.



